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Gas Facts

1985 • A Statistical Record of the Gas Utility Industry

American Gas Association
Department of Statistics

gas facts

1985 DATA

■ ENERGY RESERVES ■ NATURAL GAS SUPPLY

■ UNDERGROUND STORAGE

■ DISTRIBUTION AND TRANSMISSION

■ ENERGY CONSUMPTION

■ CUSTOMERS ■ SALES ■ REVENUES

■ PRICES ■ APPLIANCE AND HOUSING DATA

■ FINANCE ■ PERSONNEL DATA

■ GLOSSARY ■ INDEX

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Prepared by: Planning and Analysis Group

Michael I. German, Vice President
Robert B. Kalisch, Director, Gas Supply and Statistics
Patrick J. Curley, Manager, Statistical Services

GAS FACTS
1985 DATA

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AMERICAN GAS ASSOCIATION

The American Gas Association assumed its present status as the gas utility industry trade association in 1927, after a merger of two predecessor organizations. It renders assistance to the gas utility industry so that the industry may serve its customers more efficiently. Dependence is placed upon the voluntary cooperation of gas companies and established committees composed of representatives from these companies.

The Association recognizes the need for factual information regarding the gas industry for the use, not only of industry organizations, but also interested outside publics. Its statistical efforts are a vital part of this function, and the publication of Gas Facts is one result of these efforts. The statistical activities of A.G.A. are performed by the Department of Statistics with guidance by the Statistics and Related Economics Committee.

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GLENN P. THOMAS, Manager, Gas Accounting, Transcontinental Gas Pipe Line Corporation
JOHN J. TRACY, Corporate Economist, Brooklyn Union Gas Company, The

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*For those unfamiliar with the gas industry energy equivalents, unit conversions are given here.

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INTRODUCTION

GENERAL

This publication contains detailed statistics for 1985 and summary statistics for 1960–1984 for the gas utility industry which by definition, consists of the companies engaged in natural gas distribution and transmission. The publication also contains relevant data on the gas producing segment of the industry and key statistics on other energy industries.

Production data of the gas industry, and pertinent other energy industry data, are also included. Gas volumes are expressed in millions of cubic feet (at 14.73 psia and 60°F unless otherwise noted) and in British thermal units (Btu) to permit direct comparison with other energy data. A conversion table is included as Appendix B.

Appendix C contains a sample listing of gas utility companies according to their classification as distribution, transmission, integrated, or in some cases, combination companies. These classifications are defined in the glossary, Appendix A. Appendix D contains consumption data gathered by the Gas Requirements Committee. Throughout the publication totals may not add due to independent rounding.

The user should be aware that there has developed a sizeable transportation market which directly affects gas utility sales quantities. Although total pipeline throughput may remain the same, as transportation volumes to end-users increase, gas utility sales quantities to end-users will decrease.

Data presented in *Gas Facts,* broken down by company type, are not necessarily comparable from year to year. Acquisitions, mergers and corporate reorganizations continue to cause the number of companies in any given category to vary from year to year. Some of these changes are sizeable and can cause a dramatic shift in the data reported for a specific category from year to year.

SOURCES OF INFORMATION

Most of the information contained in this volume is developed from data contained in the Uniform Statistical Report, a detailed information form prepared annually by both electric and gas utility companies. Information is also derived from reports filed with regulatory commissions, from financial publications, and from statistical reports prepared by government and private agencies. For 1985, the gas utility companies participating in the Uniform Statistical Report survey represented 97 percent of total gas utility industry sales. Data for non-reporting companies, whose sales represent the remaining 3 percent, were estimated based on recent historical experience.

Employee accident data were taken from the A.G.A. *Disabling Injury Experience of the Gas Utility Industry* report and the National Safety Council *Accident Facts.* Estimates of proved reserves of natural gas, natural gas liquids and petroleum were taken from the U.S. Department of Energy report *U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves,* 1985 annual report.

Since this time series only begins in 1977, A.G.A., API and CPA data on natural gas reserves, 1960–1979, are presented. Statistics on underground storage operations were developed by the A.G.A. Committee on Underground Storage. Data for gas spaceheating customers were taken from the A.G.A. *Gas Househeating Survey.* Data on new security issues, as well as related cost and yield data, were derived from various financial publications, supplemented by data provided in the Uniform Statistical Report.

ACKNOWLEDGEMENTS

Our thanks go to those companies participating in the Uniform Statistical Report information gathering effort. Their cooperation and support are the essential elements which have made this publication a primary source of gas utility industry data, and an important industry reference. The cooperation of the public and governmental agencies credited in tables is also greatly appreciated.

Credit also goes to Senior Energy Statistician Ellen Hahn, Energy Statisticians Carole Williams-Hopkins and Susan Brown, and Summer Intern Chris Sortzi. Also contributing to the effort were the A.G.A. Computer Services and Publications/Graphic Services Departments; Bob Kalisch--Director, Gas Supply and Statistics; and Patrick Curley—Manager, Statistical Services.

SECTION 1
1985 IN REVIEW

Natural gas supplies continued to exceed demand in 1985. Despite a downturn in gas well completions in 1985, new gas discoveries remained strong replacing 70.5 percent of production in the lower-48 states. The decrease in gas well drilling in 1985 was a result of an excess gas production capability, the "bubble", which served as a serious deterrent to new gas exploration and production activity.

Lower-48 state reserves additions were 77.9 percent of gas production in 1985 and total U.S. reserves declined to 193 Tcf. Even so, reserves additions for the lower-48 states have averaged 92.7 percent of production from 1981-1985.

Distribution and transmission facilities increased in 1985 to 1,118.9 thousand miles of distribution main and pipeline, while storage capacity remains over 7.7 Tcf. Thus the gas utility industry's deliverability capacity continues to be matched to the steadily expanding number of gas customers. Average gas utility customers increased in 1985 to 49,971,300.

Gas utility industry sales declined 4.2% in 1985 to 12,615.5 trillion Btu. Residential and commercial sales decreased 2.5% and 2.4%, respectively, from 1984 levels, while industrial sales decreased 5.9%.

Natural gas prices declined 2.1% in 1985 reflecting the impact of competitive market pricing for natural gas.

TABLE 1-1
COMPARISON OF GAS UTILITY INDUSTRY CUSTOMERS, SALES, AND REVENUES BY CLASS OF SERVICE, 1984 AND 1985

	1984	1985	Percentage Change
CUSTOMERS—TOTAL[a]	**49,324,600**	**49,971,300**	**+ 1.3**
Residential	45,366,900	45,929,300	+ 1.2
Commercial	3,730,300	3,815,700	+ 2.3
Industrial	180,200	179,100	− 0.6
Other	47,200	47,300	+ 0.2
SALES—TOTAL[b]	**13,161,700**	**12,615,500**	**− 4.2**
Residential	4,628,300	4,513,000	− 2.5
Commercial	2,396,000	2,338,100	− 2.4
Industrial	5,991,000	5,634,900	− 5.9
Other	146,400	129,500	−11.5
REVENUES—TOTAL[c]	**$65,496,298**	**$63,293,162**	**− 6.2**
Residential	26,484,877	26,864,030	− 2.3
Commercial	13,205,106	12,722,274	− 3.7
Industrial	26,093,776	23,086,372	−11.5
Other	712,539	620,486	−12.9

a. Yearly averages.
b. Sales quantities in billions of Btu.
c. Revenues in thousands of dollars.

SECTION 2
ENERGY RESERVES

Prior to 1980, data on reserves of oil, natural gas and gas liquids were taken from *Reserves of Crude Oil, Natural Gas Liquids, and Natural Gas in the United States and Canada,* an annual report published jointly by A.G.A., the American Petroleum Institute (API) and the Canadian Petroleum Association (CPA). The publication of this report was discontinued after the year-end 1979 report was released in June, 1980. Since 1977, however, the Energy Information Administration (EIA) within the Department of Energy has published an annual reserves report. Data listed below and in several of the tables in this section were taken from the EIA series. For years prior to 1980 A.G.A./API/CPA data is also listed for natural gas reserves.

Reserves as of December 31

	1985	% Change 85/84
Natural Gas		
(Billions of cubic feet)		
Total	193,369	− 2.1
% of Non-Associated, estimated	70.0	− 0.8
% of Associated-Dissolved, estimated	30.0	+ 2.0
Underground Storage*	5,129	− 4.1
Gross Additions	11,891	− 17.5
Production	15,985	− 7.0
Natural Gas Liquids		
(Millions of barrels)		
Total	7,944	+ 3.9
Gross Additions	1,054	+103.5
Production	753	− 3.0
Crude Oil		
(Millions of barrels)		
Total	28,416	− 0.1
Gross Additions	3,022	− 19.4
Production	3,052	+ 0.5

*Not included in Total Reserves. Data taken from "The Underground Storage of Gas in the United States and Canada."

CHART 1-1

SELECTED GAS INDUSTRY HIGHLIGHTS OF 1985

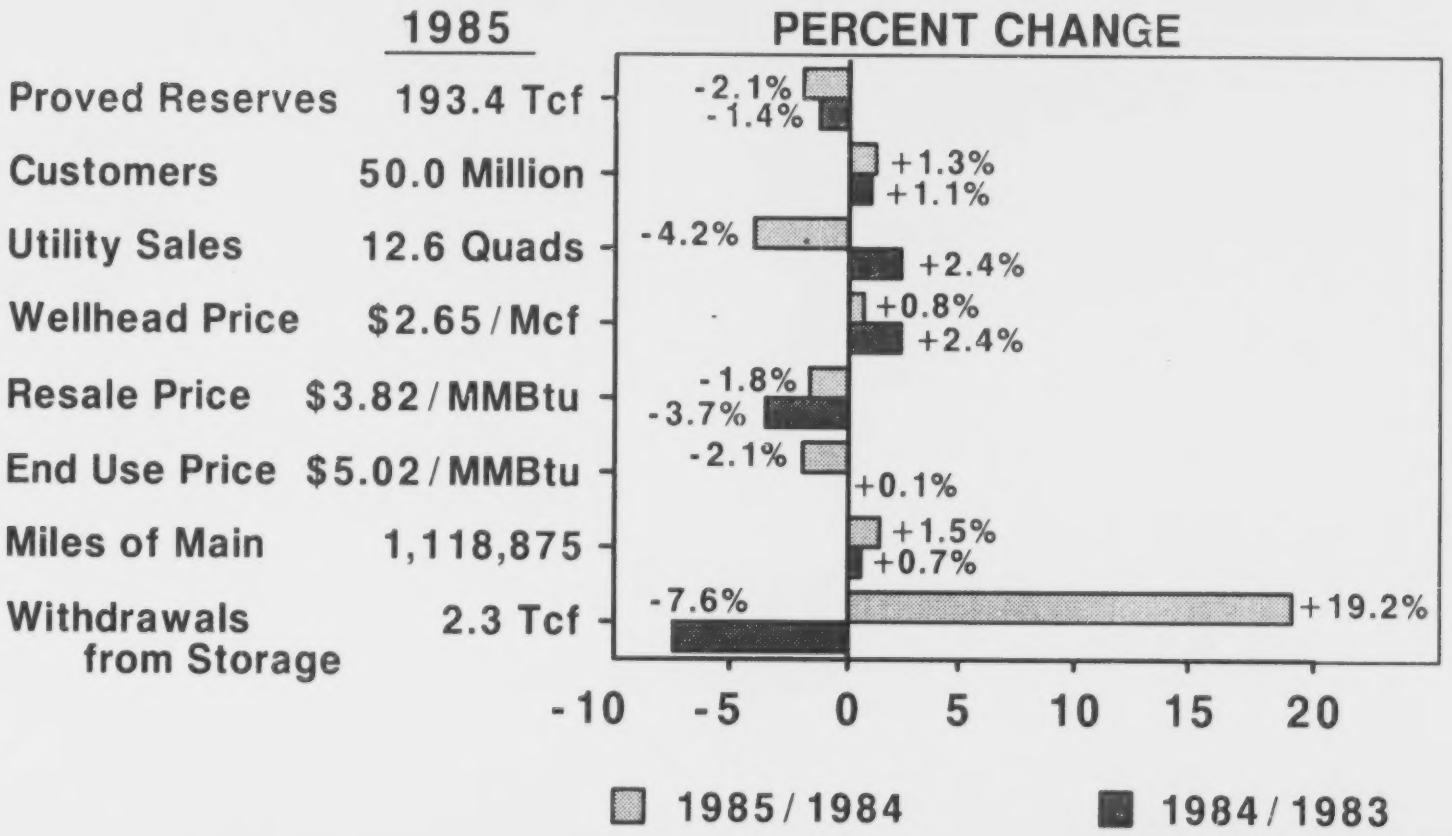


TABLE 2-1
SUMMARY OF ANNUAL ESTIMATES OF PROVED RESERVES OF NATURAL GAS IN THE UNITED STATES, 1960-1979[a]

(Millions of Cubic Feet)

	Changes in Reserves during year										
Year	Extensions	Extensions and Revisions	Revisions	New Field Discoveries	Discoveries of New Fields and New Pools in Old Fields	New Reservoir Discoveries	Total of Discoveries, Revisions and Extensions	Net Change in Underground Storage	Preliminary Net Production during Year[c]	Estimated Proved Reserves as of End of Year	Change over Previous Year
1960	—	7,293,015	—	—	6,600,963	—	13,893,978	281,273	13,019,356	262,326,326	1,155,895
1961	—	10,258,692	—	—	6,907,729	—	17,166,421	159,544	13,378,649	266,273,642	3,947,316
1962	—	13,184,794	—	—	6,299,164	—	19,483,958	159,231	13,637,973	272,278,858	6,005,216
1963	—	12,586,733	—	—	5,577,934	—	18,164,667	253,733	14,546,025	276,151,233	3,872,375
1964	—	13,342,838	—	—	6,909,301	—	20,252,139	195,110	15,347,028	281,251,454	5,100,221
1965	—	14,775,570	—	—	6,543,709	—	21,319,279	150,483	16,252,293	286,468,923	5,217,469
1966	9,224,745	—	4,937,962	2,947,329	—	3,110,396	20,220,432	134,523	17,491,073	289,332,805	2,863,882
1967	9,538,584	—	6,570,578	3,170,520	—	2,524,651	21,804,333	151,403	18,380,838	292,907,703	3,574,898
1968	7,758,821	—	3,016,146	1,376,429	—	1,545,612	13,697,008	118,569	19,373,428	287,349,852	(5,557,851)
1969	5,800,489	—	(1,238,261)	1,769,557	—	2,043,219	8,375,004	107,169	20,723,190	275,108,835	(12,241,017)
1970	6,158,168	—	(99,721)	27,770,223[b]	—	3,367,689	37,196,359	402,018	21,960,804	290,746,408	15,637,573
1971	6,374,706	—	(1,227,400)	1,317,574	—	3,360,541	9,825,421	310,301	22,076,512	278,805,618	(11,940,790)
1972	6,153,683	—	(1,077,791)	1,462,539	—	3,096,132	9,634,563	156,563	22,511,898	266,084,846	(12,720,772)
1973	6,177,286	—	(3,474,756)	2,152,151	—	1,970,368	6,825,049	(354,282)	22,605,406	249,950,207	(16,134,639)
1974	5,847,251	—	(1,333,285)	2,013,745	—	2,151,473	8,679,184	(178,424)	21,318,470	237,132,497	(12,817,410)
1975	6,027,433	—	383,449	2,423,382	—	1,649,424	10,483,688	302,561	19,718,570	228,200,176	(8,932,321)
1976	5,337,707	—	(1,197,119)	1,421,013	—	1,993,867	7,555,468	(187,550)	19,542,020	216,026,074	(12,174,102)
1977	6,601,229	—	983,551	2,114,505	—	2,152,639	11,851,924	446,930	19,447,050	208,877,878	(7,148,196)
1978	6,733,441	—	118,436	1,719,938	—	2,014,329	10,586,144	148,733	19,311,048	200,301,707	(8,576,171)
1979	7,113,113	—	2,907,551	2,575,779	—	1,689,504	14,285,947	239,323	19,910,353	194,916,624	(5,385,083)

a. Volumes are calculated at a pressure base of 14.73 psi, absolute, and at a standard temperature of 60°F.
b. Includes the estimates of proved reserves in the Prudhoe Bay Permo-triassic reservoir discovered in 1968 and not previously included.
c. "Preliminary Net Production" equals estimated gross withdrawals less (1) gas reinjected into producing reservoirs for cycling and pressure maintenance, and (2) natural gas liquids. "Preliminary Net Production" differs from U.S. Bureau of Mines "Marketed Production" in that (1) the sources from which they are derived are different, and (2) "Marketed Production" includes natural gas liquids.

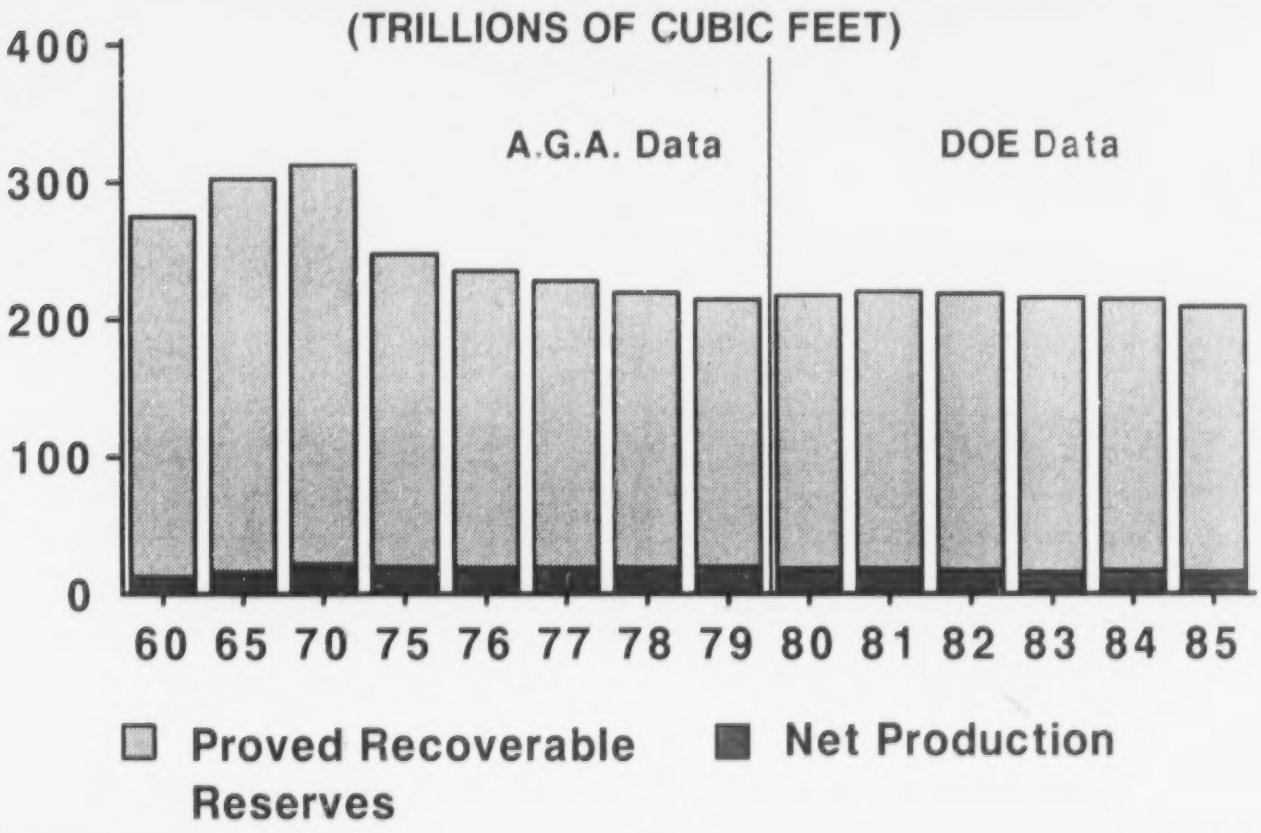
( ): Denotes negative value.

Source: A.G.A., American Petroleum Institute and Canadian Petroleum Association. *Reserves of Crude Oil, Natural Gas Liquids and Natural Gas in the United States and Canada as of December 31, 1979.*

Note: Publication of the above mentioned source ceased with the December 31, 1979 edition. See Table 2-2 for EIA information covering 1976-1984.

CHART 2-1

PROVED RECOVERABLE RESERVES & NET PRODUCTION OF NATURAL GAS IN THE UNITED STATES



REFERENCE: TABLES 2-1, 2-2

TABLE 2-2
SUMMARY OF ANNUAL ESTIMATES OF PROVED RESERVES OF NATURAL GAS IN THE UNITED STATES, 1976–1985

(Billions of Cubic Feet)

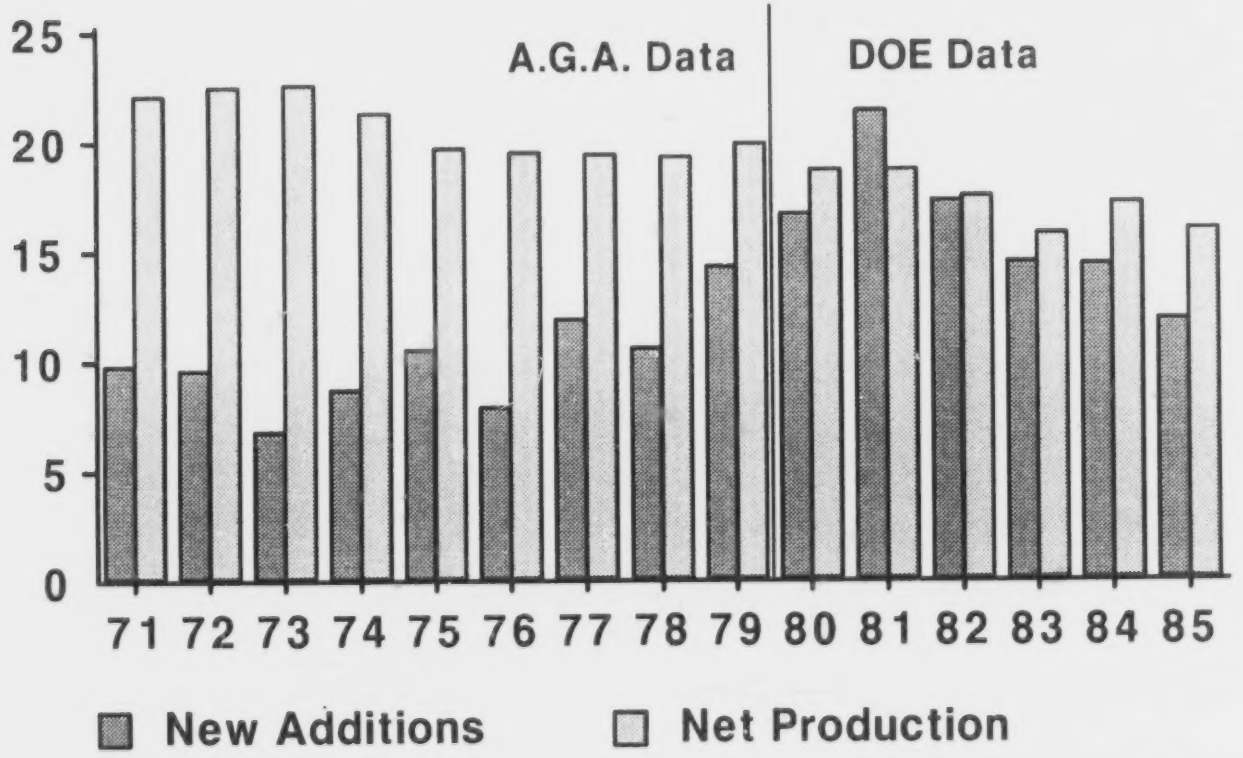
	Changes in Reserves During Year									
Year	Net of Corrections and Adjustments (1)	Revision Increases (2)	Revision Decreases (3)	Extensions to Old Reservoirs (4)	New Reservoir Discoveries in Old Fields (5)	New Field Discoveries (6)	Total Discoveries[a] (7)	Production Dry (8)	Proved Reserves[b] 12/31 (9)	Net Change From Prior Year (10)
1976	—	—	—	—	—	—	—	—	213,278[c]	—
1977	(20)[d]	13,691	15,296	8,129	3,301	3,173	14,603	18,843	207,413	(5,865)
1978	2,429	14,969	15,994	9,582	4,579	3,860	18,021	18,805	208,033	620
1979	(2,264)	16,410	16,629	8,950	2,566	3,188	14,704	19,257	200,997	(7,036)
1980	1,201	16,972	15,923	9,357	2,577	2,539	14,473	18,699	199,021	(1,976)
1981	1,627	16,412	13,813	10,491	2,998	3,731	17,220	18,737	201,730	2,709
1982	2,378	19,795	19,340	8,349	3,419	2,687	14,455	17,506	201,512	(218)
1983	3,090	17,602	17,617	6,909	2,965	1,574	11,448	15,788	200,247	(1,265)
1984	(2,241)	17,841	14,712	8,299	2,686	2,536	13,521	17,193	197,463	(2,784)
1985	(1,708)	18,775	16,304	7,169	2,960	999	11,128	15,985	193,369	(4,094)

a. Col. 4 + Col. 5 + Col. 6 = Col. 7.
b. Proved reserves = Prior year Col. 9 + Col. 1 + Col. 2 − Col. 3 + Col. 7 − Col. 8.
c. Based on following year data only.
d. Consists only of reported corrections.

Note: "Old" means discovered in a prior year. "New" means discovered during the report year.
Source: U.S. Department of Energy, Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, 1985 Annual Report.

CHART 2-2

NET PRODUCTION AND NEW ADDITIONS TO GAS RESERVES (TRILLIONS OF CUBIC FEET)



REFERENCE: TABLES 2-1, 2-2

TABLE 2-3
CHANGES IN ESTIMATED PROVED RESERVES OF NATURAL GAS, IN THE UNITED STATES BY STATE, DURING 1985[a]

(Billions of Cubic Feet)

State and Subdivision	Published Proved Reserves 12/31/84	Changes in Reserves During 1985		
		Net of Corrections and Adjustments	Revision Increases	Revision Decreases
(1) Total United States	**197,463**	**(1,708)**	**18,775**	**16,304**
(2) Alabama Onshore	961	(14)	79	177
(3) Alaska	34,476	(359)	523	552
(4) Arkansas	2,227	(127)	105	178
(5) California	5,554	(134)	511	307
(6) Coastal Region Onshore	265	(5)	37	22
(7) Los Angeles Basin Onshore	156	9	58	22
(8) San Joaquin Basin Onshore	3,685	(136)	297	184
(9) State & Federal Offshore	1,448	(2)	119	79
(10) Colorado	2,943[d]	(109)	368	289
(11) Florida	65	(2)	0	0
(12) Kansas	9,387	288	274	194
(13) Kentucky	613	(126)	343	26
(14) Louisiana[b]	41,399	73	5,223	4,431
(15) North	2,494	265	208	203
(16) South Onshore	10,331	176	1,359	1,524
(17) South Offshore[b]	28,574	(368)	3,656	2,704
(18) Michigan	1,112	(26)	98	132
(19) Mississippi	1,491	8	88	176
(20) Montana	802	56	65	40
(21) New Mexico	11,364	131	1,366	1,487
(22) East	3,197	26	461	430
(23) West	8,167	105	905	1,057
(24) New York	389	0	11	27
(25) North Dakota	566	(31)	118	46
(26) Ohio	1,541	(77)	29	62
(27) Oklahoma	16,126	(500)	2,357	1,648
(28) Pennsylvania	1,575	(111)	188	147
(29) Texas	49,883	(219)	5,811	5,421
(30) District 1	838	160	87	91
(31) District 2 Onshore	2,512	(61)	277	354
(32) District 3 Onshore	4,708	(329)	598	557
(33) District 4 Onshore	8,525	(5)	778	1,400
(34) District 5	1,874	39	347	177
(35) District 6	4,703	110	593	369
(36) District 7B	794	(5)	32	42
(37) District 7C	2,866	(73)	377	144
(38) District 8	7,343	142	820	581
(39) District 8A	907	49	111	29
(40) District 9	900	10	64	72
(41) District 10	5,461	124	527	390
(42) State and Federal Offshore	8,452	(380)	1,200	1,215
(43) Utah	2,080	(65)	111	83
(44) Virginia	216	19	10	15
(45) West Virginia	2,136	(55)	497	471
(46) Wyoming	10,482	(331)	598	391
(47) Miscellaneous[c]	75	3	2	4

a. Volumes are calculated at a pressure base 14.73 psi, absolute, and at a standard temperature of 60°F.
b. Includes offshore Alabama.
c. Includes Arizona, Illinois, Indiana, Maryland, Nebraska, Oregon, South Dakota, and Tennessee.
d. Indicates that the estimate is associated with a sampling error (95 percent confidence interval) which exceeds 20 percent of the estimated value.

Note: "Old" means discovered in a prior year. "New" means discovered during the report year.

Source: U.S. Department of Energy, Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, 1985 Annual Report.

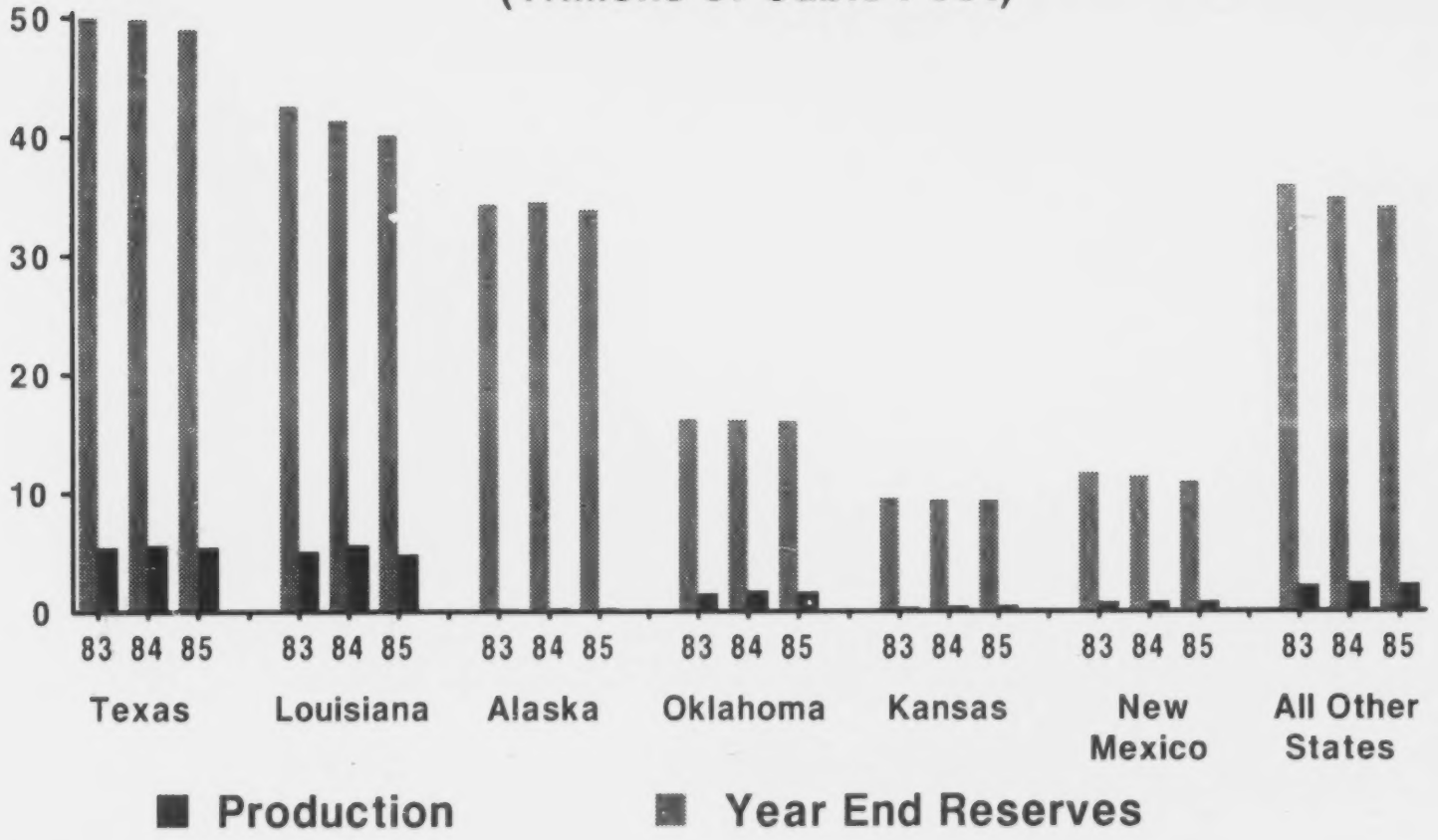
TABLE 2-3 (Continued)
CHANGES IN ESTIMATED PROVED RESERVES OF NATURAL GAS, IN THE UNITED STATES BY STATE, DURING 1985

(Billions of Cubic Feet)

Changes in Reserves During 1985					
Extensions	New Field Discoveries	New Reservoir Discoveries In Old Fields	Production	Proved Reserves 12/31/85	
7,169	**999**	**2,960**	**15,985**	**193,369**	**(1)**
36	8	13	85	821	(2)
71	0	0	312	33,847	(3)
138	13	16	175	2,019	(4)
246	12	2	440	5,444	(5)
9	0	0	28	256	(6)
2	0	0	22	181	(7)
221	12	2	323	3,574	(8)
14	0	0	67	1,433	(9)
108	22	4	166	2,881	(10)
0	0	0	8	55	(11)
71	8	6	503	9,337	(12)
12	0	3	53	766	(13)
1,287	279	1,199	4,878	40,151	(14)
118	5	11	311	2,587	(15)
350	31	328	1,243	9,808	(16)
819	243	860	3,324	27,756	(17)
20	42	3	132	985	(18)
79	10	11	151	1,360	(19)
3	2	18	49	857	(20)
335	9	25	843	10,900	(21)
179	8	22	429	3,034	(22)
156	1	3	414	7,866	(23)
6	0	8	18[d]	369[d]	(24)
17	1	3	59	569	(25)
34	0	6	140	1,331	(26)
1,134	94	163	1,686	16,040	(27)
218	0	17	123	1,617[d]	(28)
2,625	412	1,412	5,468	49,035	(29)
51	4	32	114	967	(30)
242	18	52	328	2,358	(31)
224	132	77	673	4,180	(32)
595	77	724	1,044	8,250	(33)
141	0	1	167	2,058	(34)
149	5	27	396	4,822	(35)
36	6	1	114	708	(36)
113	10	13	248	2,914	(37)
220	13	19	646	7,330	(38)
8	0	1	89	958	(39)
131	0	0	141	892	(40)
266	22	8	549	5,469	(41)
449	125	457	959	8,129	(42)
27	0	2	73	1,999	(43)
20	0	0	15	235	(44)
92	0	23	164	2,058	(45)
586	87	19	433	10,617	(46)
4	0	7	11	76	(47)

CHART 2-3

NATURAL GAS STATE RESERVES FOR 1983, 1984 & 1985
(Trillions of Cubic Feet)



REFERENCE: TABLE 2-3

TABLE 2–5
CHANGES IN ESTIMATED PROVED RESERVES OF NATURAL GAS LIQUIDS, IN THE UNITED STATES BY STATE, DURING 1985

(Millions of Barrels)[a]

State and Subdivision	Published Proved Reserves 12/31/84	Changes In Reserves During 1985		
		Net of Corrections and Adjustments	Revision Increases	Revision Decreases
(1) Total United States	7,643	426	906	744
(2) Alabama	200	(4)	12	13
(3) Alaska	19	356	23	13
(4) Arkansas	12	0	0	1
(5) California	141	16	15	10
(6) Coastal Region Onshore	15	2	2	2
(7) Los Angeles Basin Onshore	5	1	2	1
(8) San Joaquin Basin Onshore	105	14	10	6
(9) State & Federal Offshore	16	(1)	1	1
(10) Colorado	155	13	22	17
(11) Florida	17	2	0	0
(12) Kansas	424	(38)	12	8
(13) Kentucky	24	(6)	12	1
(14) Louisiana	1,188	36	167	171
(15) North	57	15	6	8
(16) South Onshore	454	15	68	76
(17) South Offshore	677	6	93	87
(18) Michigan	84	(10)	7	9
(19) Mississippi	15	(1)	1	2
(20) Montana	18	3	2	1
(21) New Mexico	511	(40)	61	64
(22) East	221	1	33	31
(23) West	290	(41)	28	33
(24) North Dakota	73	(1)	13	6
(25) Oklahoma	769	36	126	91
(26) Texas	3,048	(23)	357	285
(27) District 1	39	3	4	5
(28) District 2 Onshore	103	0	13	16
(29) District 3 Onshore	270	3	40	39
(30) District 4 Onshore	295	(17)	30	50
(31) District 5	74	0	14	10
(32) District 6	298	(4)	36	25
(33) District 7B	106	9	5	6
(34) District 7C	233	11	35	13
(35) District 8	691	(14)	78	53
(36) District 8A	282	2	33	10
(37) District 9	119	(4)	8	11
(38) District 10	440	1	42	32
(39) State Offshore	10	0	2	3
(40) Federal Offshore	88	(13)	17	12
(41) Utah and Wyoming	860	82	55	32
(42) West Virginia	80	7	21	20
(43) Miscellaneous[b]	5	(2)	0	0

a. Barrel = 42 U.S. gallons.
b. Includes Illinois, Indiana, Nebraska, New York, Ohio, Pennsylvania, and Tennessee.
Source: U.S. Department of Energy, Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, 1985 Annual Report.

TABLE 2-5 (Continued)
CHANGES IN ESTIMATED PROVED RESERVES OF NATURAL GAS LIQUIDS, IN THE UNITED STATES BY STATE, DURING 1985

(Millions of Barrels)[a]

Changes in Reserves During 1985					
Extensions	New Field Discoveries	New Reservoir Discoveries in Old Fields	Production	Proved Reserves 12/31/85	
337	**44**	**85**	**753**	**7,944**	(1)
2	0	1	18	182	(2)
3	0	0	5	383	(3)
1	0	0	1	11	(4)
9	0	0	13	158	(5)
1	0	0	2	16	(6)
0	0	0	1	8	(7)
7	0	0	10	120	(8)
1	0	0	0	6	(9)
9	1	0	10	173	(10)
0	0	0	2	17	(11)
3	0	0	20	373	(12)
0	0	0	2	27	(13)
44	6	32	146	1,156	(14)
3	0	0	8	65	(15)
20	2	15	56	442	(16)
21	4	17	82	649	(17)
1	3	0	9	67	(18)
0	0	0	1	12	(19)
0	0	0	1	21	(20)
18	0	1	42	445	(21)
13	0	1	29	209	(22)
5	0	0	13	236	(23)
2	0	0	7	74	(24)
63	4	7	88	826	(25)
147	20	42	325	2,981	(26)
3	0	1	5	40	(27)
12	1	3	16	100	(28)
14	9	5	42	260	(29)
21	3	21	34	269	(30)
5	0	0	6	77	(31)
11	0	1	24	293	(32)
5	1	0	16	104	(33)
10	1	1	22	256	(34)
19	1	2	59	665	(35)
2	0	0	26	283	(36)
17	0	0	18	111	(37)
23	2	1	44	433	(38)
1	0	2	2	10	(39)
4	2	5	11	80	(40)
31	10	1	58	949	(41)
4	0	1	7	86	(42)
0	0	0	0	3	(43)

TABLE 2-6
TOTAL ESTIMATED REMAINING IDENTIFIED RESERVES OF COAL AND LIGNITE BY STATE, AS OF JANUARY 1, 1984

(Billions of Short Tons)

State	Total Coal and Lignite	Coal			
		Anthracite and Semianthracite	Subbituminous	Bituminous	Lignite
United States	**488.3**	**7.3**	**181.2**	**254.6**	**45.1**
Alabama	5.1	—	—	4.0	1.1
Alaska	6.2	—	5.4	.7	a
Arizona	.4	—	—	.4	—
Arkansas	.4	1	—	.3	a
Colorado	17.2	a	4.0	9.0	4.2
Georgia	a	—	—	a	—
Idaho	a	—	—	a	—
Illinois	79.0	—	—	79.0	—
Indiana	10.4	—	—	10.4	—
Iowa	2.2	—	—	2.2	—
Kansas	1.0	—	—	1.0	—
Kentucky	40.0	—	—	40.0	—
Maryland	.8	—	—	.8	—
Michigan	.1	—	—	.1	—
Missouri	6.0	—	—	6.0	—
Montana	120.3	—	103.1	1.4	15.8
New Mexico	4.6	a	2.6	2.0	—
North Carolina	a	—	—	a	—
North Dakota	9.9	—	—	—	9.9
Ohio	18.8	—	—	18.8	—
Oklahoma	1.6	—	—	1.6	—
Oregon	a	—	a	—	—
Pennsylvania	29.9	7.1	—	22.9	—
South Dakota	.4	—	—	—	.4
Tennessee	.9	—	—	.9	—
Texas	13.8	—	—	—	13.8
Utah	6.4	—	a	6.4	—
Virginia	3.2	.1	—	3.1	—
Washington	1.5	—	1.2	.3	a
West Virginia	38.9	—	—	38.9	—
Wyoming	69.3	—	64.9	4.4	—

a. Less than 50 million short tons.
Source: U.S. Department of Energy, Energy Information Administration, *Coal Production 1984*.

TABLE 2-7
SUMMARY OF ANNUAL ESTIMATES OF PROVED RESERVES OF CRUDE OIL IN THE UNITED STATES, 1976–1985

(Millions of Barrels)[a]

Year	Net of Corrections and Adjustments (1)	Revision Increases (2)	Revision Decreases (3)	Extensions to Old Reservoirs (4)	New Reservoir Discoveries in Old Fields (5)	New Field Discoveries (6)	Total Discoveries[b] (7)	Production (8)	Proved Reserves[c] 12/31 (9)	Net Change From Prior Year (10)
1976	—	—	—	—	—	—	—	—	33,502[d]	—
1977	(40)[e]	1,503	1,117	496	130	168	794	2,862	31,780	(1,722)
1978	366	2,799	1,409	444	116	267	827	3,008	31,355	(425)
1979	337	2,438	2,001	424	104	108	636	2,955	29,810	(1,545)
1980	219	2,883	994	572	147	143	862	2,975	29,805	(5)
1981	138	2,151	880	750	157	254	1,161	2,949	29,426	(379)
1982	(83)	2,245	1,811	634	193	204	1,031	2,950	27,858	(1,568)
1983	462	2,810	1,299	629	190	105	924	3,020	27,735	(123)
1984	159	3,672	1,227	744	158	242	1,144	3,037	28,446	711
1985	429	3,037	1,439	742	169	84	995	3,052	28,416	(30)

a. Barrel = 42 U.S. gallons.
b. Col. 4 + Col. 5 + Col. 6 = Col. 7.
c. Proved Reserves = Prior year Col. 9 + Col. 1 + Col. 2 − Col. 3 + Col. 7 − Col. 8.
d. Based on following year data only.
e. Consists only of reported corrections.
Note: "Old" means discovered in a prior year. "New" means discovered during the report year.
Source: U.S. Department of Energy, Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, 1985 Annual Report.

TABLE 2-4
SUMMARY OF ANNUAL ESTIMATES OF PROVED RESERVES OF NATURAL GAS LIQUIDS IN THE UNITED STATES, 1978–1985

(Millions of Barrels)[a]

Year	Net of Corrections and Adjustments (1)	Revision Increases (2)	Revision Decreases (3)	Extensions to Old Reservoirs (4)	New Reservoir Discoveries in Old Fields (5)	New Field Discoveries (6)	Total Discoveries[b] (7)	Production (8)	Proved Reserves[c] 12/31 (9)	Net Change From Prior Year (10)
1978	—	—	—	—	—	—	—	—	6,772[d]	--
1979	64[e]	677	726	364	97	94	555	727	6,615	(157)
1980	153	743	639	418	79	90	587	731	6,728	113
1981	231	729	643	542	91	131	764	741	7,068	340
1982	299	811	832	375	109	112	596	721	7,221	153
1983	849	847	781	321	99	70	490	725	7,901	680
1984	(123)	866	724	348	96	55	499	776	7,643	(258)
1985	426	906	744	337	85	44	466	753	7,944	301

a. Barrel = 42 U.S. gallons.
b. Col. 4 + Col. 5 + Col. 6 = Col. 7.
c. Proved Reserves = Prior year Col. 9 + Col. 1 + Col. 2 − Col. 3 + Col. 7 − Col. 8.
d. Based on following year data only.
e. Consists only of reported corrections.
Note: "Old" means discovered in a prior year. "New" means discovered during the report year.
Source: U.S. Department of Energy, Energy Information Administration, *U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves*, 1985 Annual Report.

TABLE 2-8
CHANGES IN ESTIMATED PROVED RESERVES OF CRUDE OIL, IN THE UNITED STATES BY STATE, DURING 1985

(Millions of Barrels)[a]

State and Subdivision	Published Proved Reserves 12/31/84	Changes in Reserves During 1985: Net of Corrections and Adjustments	Revision Increases	Revision Decreases
(1) Total United States	**28,446**	**429**	**3,037**	**1,439**
(2) Alabama	68[b]	(13)	12	4
(3) Alaska	7,563	68	173	242
(4) Arkansas	114	(9)	12	7
(5) California	5,707	(25)	579	172
(6) Coastal Region Onshore	628	(32)	84	16
(7) Los Angeles Basin Onshore	373	60	80	53
(8) San Joaquin Basin Onshore	3,197	32	308	77
(9) State & Federal Offshore	1,509	(85)	107	26
(10) Colorado	198	17	9	10
(11) Florida	82	0	2	2
(12) Illinois	153	(10)	17	6
(13) Indiana	33[b]	12	0	4
(14) Kansas	377	82	30	18
(15) Kentucky	41[b]	13	1	8
(16) Louisiana	2,661	17	510	303
(17) North	165	59	11	18
(18) South Onshore	585	(27)	113	53
(19) South State Offshore	130	(9)	24	9
(20) South Federal Offshore	1,781	(6)	362	223
(21) Michigan	180	23	32	28
(22) Mississippi	201	2	15	17
(23) Montana	224	(9)	51	15
(24) Nebraska	46[b]	(4)	5	1
(25) New Mexico	660	44	86	50
(26) East	625	33	82	47
(27) West	35	11	4	3
(28) North Dakota	260	(15)	49	19
(29) Ohio	116[b]	(26)	1	3
(30) Oklahoma	940	(17)	162	97
(31) Pennsylvania	40[b]	6	3	7
(32) Texas	7,557	258	1,064	372
(33) District 1	173	24	7	5
(34) District 2 Onshore	192	(5)	19	9
(35) District 3 Onshore	522	(31)	74	40
(36) District 4 Onshore	99	0	22	11
(37) District 5	36	18	15	6
(38) District 6	889	(4)	94	49
(39) District 7B	218	41	19	9
(40) District 7C	240	10	33	27
(41) District 8	2,342	55	210	118
(42) District 8A	2,413	28	489	53
(43) District 9	214	99	15	7
(44) District 10	108	22	25	13
(45) State and Federal Offshore	111	1	42	25
(46) Utah	172	57	59	5
(47) West Virginia	76[b]	(35)	5	4
(48) Wyoming	954	(7)	140	44
(49) Miscellaneous[c]	23	0	20	1

a. Barrel = 42 U.S. gallons.
b. Indicates that the estimate is associated with a sampling error (95 percent confidence interval) which exceeds 20 percent of the estimated value.
c. Includes Arizona, Missouri, Nevada, New York, South Dakota, Tennessee, and Virginia.
Source: U.S. Department of Energy, Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, 1985 Annual Report.

TABLE 2-8 (Continued)
CHANGES IN ESTIMATED PROVED RESERVES OF CRUDE OIL, IN THE UNITED STATES BY STATE, DURING 1985

(Millions of Barrels)[a]

Changes in Reserves During 1985					
Extensions	New Field Discoveries	New Reservoir Discoveries in Old Fields	Production	Proved Reserves 12/31/85	
742	**84**	**169**	**3,052**	**28,416**	(1)
7	9	0	10	69	(2)
161	0	0	667	7,056	(3)
2	0	0	15	97	(4)
123	3	3	417	5,801	(5)
7	0	0	40	631	(6)
8	0	1	49	420	(7)
58	3	2	265	3,258	(8)
50	0	0	63	1,492	(9)
5	2	5	28	198	(10)
6	1	0	12	77	(11)
2	0	1	21	136	(12)
0	0	0	6[b]	35[b]	(13)
11	4	1	64	423	(14)
1	0	0	6[b]	42[b]	(15)
91	33	85	452	2,642	(16)
5	1	1	28	196	(17)
21	7	18	99	565	(18)
1	0	4	19	122	(19)
64	25	62	306	1,759	(20)
10	4	0	30	191	(21)
7	3	1	28	184	(22)
6	4	1	30	232	(23)
1	0	1	6	42	(24)
22	1	1	76	688	(25)
18	1	1	70	643	(26)
4	0	0	6	45	(27)
22	3	3	48	255	(28)
1	0	1	11	79	(29)
56	3	28	140	935	(30)
0	0	0	4[b]	38[b]	(31)
187	8	29	837	7,894	(32)
4	0	0	26	177	(33)
3	0	1	33	168	(34)
20	1	8	83	471	(35)
3	0	2	17	98	(36)
5	0	0	9[b]	59[b]	(37)
5	0	4	88	851	(38)
7	0	1	38	239	(39)
17	1	4	35	243	(40)
69	2	2	229	2,333	(41)
31	2	7	206	2,711	(42)
4	2	0	42	285	(43)
16	0	0	18[b]	140[b]	(44)
3	0	0	13	119	(45)
8	0	8	23	276	(46)
1	0	0	3	40	(47)
12	6	1	111	951	(48)
0	0	0	7	35	(49)

TABLE 2-9
SUMMARY OF ANNUAL ESTIMATES OF RESERVES OF NATURAL GAS IN CANADA, 1964–1985[a]

(Millions of Cubic Feet)

	Reserves Remaining at Beginning of Year	Changes Due To: Revisions	Revisions and Extensions	Extensions	Discoveries	Net Change in Underground Storage	Net Production	Reserves Remaining at End of Year	Change During Year	Probable Remaining at End of Year[b]
MARKETABLE GAS[c]										
1964	32,992,252	—	—	—	—	—	—	39,319,544	6,327,292	45,572,431
1965	39,319,544	—	—	—	—	—	—	40,354,527	1,034,983	46,434,950
1966	40,354,527	2,158,536	—	1,532,317	512,086	17,918	1,125,289	43,450,095	3,095,568	49,269,076
1967	43,450,095	1,572,424	—	1,268,002	603,459	4,120	1,216,049	45,682,051	2,231,956	50,945,169
1968	45,682,051	230,116	—	2,867,357	282,913	(1,255)	1,394,721	47,666,461	1,948,410	54,185,935
1969	47,666,461	2,043,815	—	2,690,603	1,104,452	2,197	1,556,533	51,950,995	4,284,534	57,467,963
1970	51,950,995	493,804	—	2,516,126	193,682	20,205	1,799,184	53,375,628	1,424,633	60,289,373
1971	53,375,628	983,556	—	2,280,205	775,500	65	1,953,104	55,461,850	2,086,222	61,964,760
1972	55,461,850	(2,004,125)	—	1,243,897	487,538	(5,580)	2,247,798	52,935,782	(2,526,068)	60,546,769
1973	52,935,782	(167,054)	—	1,257,243	686,714	70,097	2,325,350	52,457,432	(478,350)	60,801,088
1974	52,457,432	2,953,557	—	3,487,099	193,056	10,428	2,393,486	56,708,086	4,250,654	64,459,133
1975	56,708,086	(177,606)	—	2,412,582	362,895	29,869	2,361,110	56,974,716	266,630	71,466,773
1976	56,974,716	(367,880)	—	3,587,990	639,345	(11,053)	2,541,176	58,281,942	1,307,226	76,359,832
1977	58,281,942	1,432,871	—	1,852,325	351,007	46,730	2,492,849	59,472,026	1,190,084	78,031,771
ESTABLISHED RESERVES										
1977	76,835,973	d	—	d	d	46,709	2,492,850	79,180,390	2,344,416	—
1978	79,180,390	2,026,962	—	2,534,342	1,018,734	3,443	2,340,406	82,423,467	3,243,077	—
1979	82,423,467	3,012,475	—	2,062,527	3,347,747	10,613	2,263,030	88,593,799	6,170,332	—
1980	88,594,374	62,043	—	1,408,320	900,050	(33,222)	2,486,016	88,445,549	(148,825)	—
1981	88,461,174	2,234,086	—	2,062,408	624,303	9,372	2,405,800	90,985,543	2,524,369	—
1982	90,985,541	1,750,541	—	1,425,609	214,029	73,450	2,466,895	91,982,275	996,734	—
1983	91,966,031	1,899,412	—	982,360	223,149	(114,502)	2,225,705	92,730,743	764,712	—
1984	92,730,742	d	—	d	d	d	2,804,502[e]	99,687,016	6,956,274	—
1985	99,145,610	d	—	d	d	d	2,909,576	98,275,160	(870,450)	—

a. Volumes are calculated at a pressure base of 14.65 psia and at a standard temperature of 60°F.
b. Includes proved reserves.
c. For definition refer to Glossary.
d. Not available.
e. Includes net change in underground storage.
( ): Denotes negative volume.
Source: American Gas Association, *Natural Gas Reserves in U.S. and Canada*, June, 1986.

TABLE 2–10
ESTIMATED ESTABLISHED REMAINING MARKETABLE RESERVES OF NATURAL GAS IN CANADA, BY PROVINCE, 1985[a]

(Millions of Cubic Feet)

Province	Remaining Reserves December 31, 1984	Change During Year	Remaining Reserves At December 31, 1985		
			Total[b]	Net	
				Non-associated	Associated/ Dissolved
Canada	**99,145,610**	**(870,450)**	**98,275,160**	**86,743,925**	**11,531,235**
Total West Canada	**98,692,769**	**(822,299)**	**97,870,470**	**86,340,047**	**11,530,423**
Alberta	67,029,996	(2,533,091)	64,496,905	54,999,499	9,497,406
Arctic Islands	13,745,841	599,411	14,345,252	13,309,875	1,035,377
Br. Columbia	7,907,274	690,204	8,597,478	8,202,743	394,735
Mackenzie Delta	8,649,089	469,503	9,118,592	8,574,957	543,635
Mainland Territories	408,785	(7,342)	401,443	385,628	15,815
Saskatchewan	951,784	(40,984)	910,800	867,345	43,455
Total East Canada	**452,841**	**(48,151)**	**404,690**	**403,878**	**812**
Ontario	448,252	(48,998)	399,254	399,254	—
Other E. Canada	4,589	847	5,436	4,624	812

a. Volumes are calculated at a pressure base of 14.65 psia and at a standard temperature of 60°F.
b. Underground storage not included.
( ): Denotes negative volume.
Source: Same as Table 2–9.

TABLE 2-11
CHANGES IN ESTIMATED ESTABLISHED REMAINING MARKETABLE RESERVES OF NATURAL GAS IN CANADA, BY PROVINCE, DURING 1985[a]

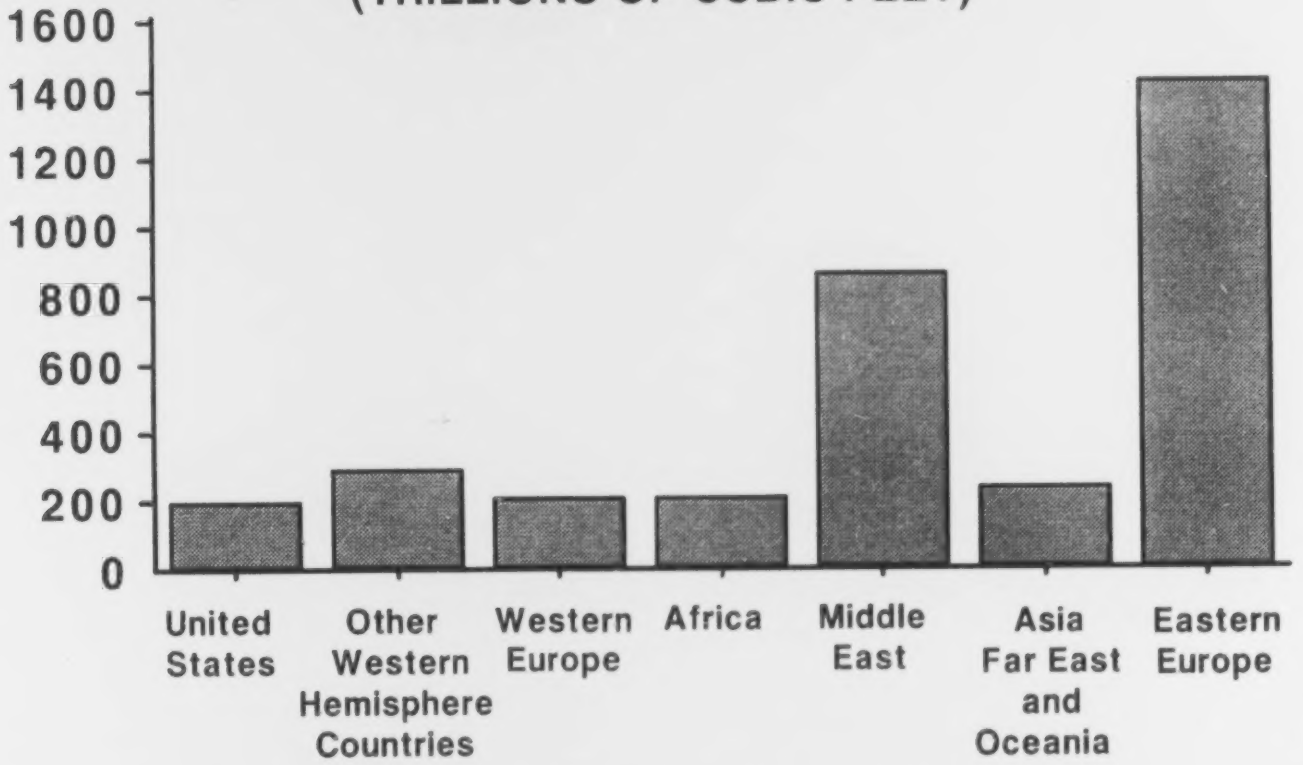
(Millions of Cubic Feet)

Province	Remaining Reserves December 31, 1984	Gross Additions	Net Production[b]	Remaining Reserves December 31, 1985
Canada	**99,145,610**	**2,039,126**	**2,909,576**	**98,275,160**
Total West Canada	**98,692,769**	**2,026,630**	**2,848,929**	**97,870,470**
Alberta	67,029,996	40,773	2,573,864	64,496,905
Arctic Islands	13,745,841	599,411	0	14,345,252
Br. Columbia	7,907,274	911,718	221,514	8,597,478
Mackenzie Delta	8,649,089	469,503	0	9,118,592
Mainland Territories	408,785	(35)	7,307	401,443
Saskatchewan	951,784	5,260	46,244	910,800
Total East Canada	**452,841**	**12,496**	**60,647**	**404,690**
Ontario	448,252	11,084	60,082	399,254
Other E. Canada	4,589	1,412	565	5,436

a. Volumes are calculated at a pressure base of 14.65 psia and at a standard temperature of 60°F.
b. Includes net change in underground storage.
( ): Denotes negative volume.
Source: Same as Table 2-9.

CHART 2-4

WORLD ESTIMATED NATURAL GAS RESERVES, 1985
(TRILLIONS OF CUBIC FEET)



WORLD TOTAL 3409.7 TRILLION CUBIC FEET

SOURCE: WORLD OIL, August, 1986

SECTION 3
NATURAL GAS SUPPLY

	1985	% Change 85/84
Maximum Day Sendout (Trillions of Btu)	76.6	− 3.9
Production (wet) (Trillions of Btu)	19,145	− 4.8*
Net Imports (Millions of cubic feet)	894,447	+13.5
Producing Gas Wells	238,342	+ 5.4*
New Gas Well Completions	15,388	+ 9.3**

*Percentage change based on preliminary data for both years.
**As estimated by the American Petroleum Institute.

Beginning in January 1985, the method of reporting oil and gas well completions changed significantly. Because a substantial time lag exists between the date a well is actually completed and the date a report on the well is received by the American Petroleum Institute (API), publishing data on an "as reported" basis does not accurately reflect the timing of completion activity. A new methodology involves reporting completions on the basis of when the completions occurred. However, in some cases, it can take over two years before a well completion is reported to the API and published.

As a result, the years 1970–1984 have been restated in this edition of Gas Facts in order to reflect the new methodology (actual date of completion). Particularly in recent years, well completion data may not necessarily be comparable from year to year as a result of the constant updating to the well completion data provided by the API.

For those tables where both total U.S. and individual state data are published, the individual state data is "as reported" and for recent periods may be subject to significant revision. The total U.S. figures reflect *estimates* by API of the number of completion reports which will ultimately be received. As such, these U.S. totals should be revised minimally in future editions of *Gas Facts*.

Please refer to American Gas Association, *Gas Energy Review*, April 1986, Volume 14, Number 4 for further details.

SUPPLY

TABLE 3-1
ANNUAL PRODUCTION OF FOSSIL ENERGY RESOURCES, AND ELECTRICITY FROM HYDROPOWER AND NUCLEAR POWER, IN THE UNITED STATES, 1960-1985[a]

(Trillions of Btu)

Year	Natural Gas Wet (unprocessed)	Crude Petroleum	Bituminous Coal and Lignite	Anthracite Coal	Hydro-power[b]	Nuclear[c]	Other[d]	Grand Total Energy
1960	13,822	14,935	10,886	478	1,578	5	e	41,704
1965	17,628	16,521	13,417	378	2,033	38	e	50,015
1970	24,154	19,772	14,820	247	2,630	229	e	61,852
1971	24,805	20,033	13,384	222	2,825	404	e	61,674
1972	24,792	20,041	14,319	181	2,866	576	e	62,775
1973[R]	24,756	19,493	13,993	f	2,861	910	46	62,060
1974[R]	23,681	18,575	14,074	f	3,177	1,272	56	60,835
1975[R]	22,014	17,729	14,990	f	3,155	1,900	72	59,860
1976[R]	21,807	17,262	15,654	f	2,976	2,111	81	59,891
1977[R]	21,892	17,454	15,755	f	2,333	2,702	82	60,219
1978[R]	21,730	18,434	14,910	f	2,937	3,024	68	61,103
1979[R]	22,362	18,104	17,539	f	2,931	2,776	89	63,800
1980[R]	22,161	18,249	18,597	f	2,900	2,739	114	64,761
1981[R]	22,006	18,146	18,377	f	2,758	3,008	127	64,422
1982[R]	20,446	18,309	18,639	f	3,256	3,131	108	63,890
1983[R]	18,714	18,392	17,250	f	3,502	3,203	133	61,194
1984[R]	20,205	18,848	19,723	f	3,363	3,538	174	65,852
1985[P]	19,145	18,884	19,388	f	2,952	4,144	213	64,726

a. The 1985 unit heat values employed are: Anthracite, 11,423 Btu per pound; bituminous coal and lignite, 10,938 Btu per pound; petroleum approx. 5,800,000 Btu per barrel; natural gas dry 1,031 Btu per cubic foot; natural gas liquids obtained by using 90,595 Btu per gallon.
b. Hydropower output is converted to theoretical energy inputs calculated from national average heat rates for fossil-fueled steam-electric plants.
c. Nuclear power energy input conversion is calculated annually by the Energy Information Administration.
d. Includes geothermal power and electricity produced from wood and waste.
e. Not available.
f. Included in "Bituminous Coal and Lignite."
R-Revised. P-Preliminary.
Source: Prior to 1977 U.S. Bureau of Mines, for 1977 and beyond, data taken from U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*.

TABLE 3-2
ANNUAL PRODUCTION OF FOSSIL ENERGY RESOURCES, AND ELECTRICITY FROM HYDROPOWER AND NUCLEAR POWER, IN THE UNITED STATES, 1960-1985

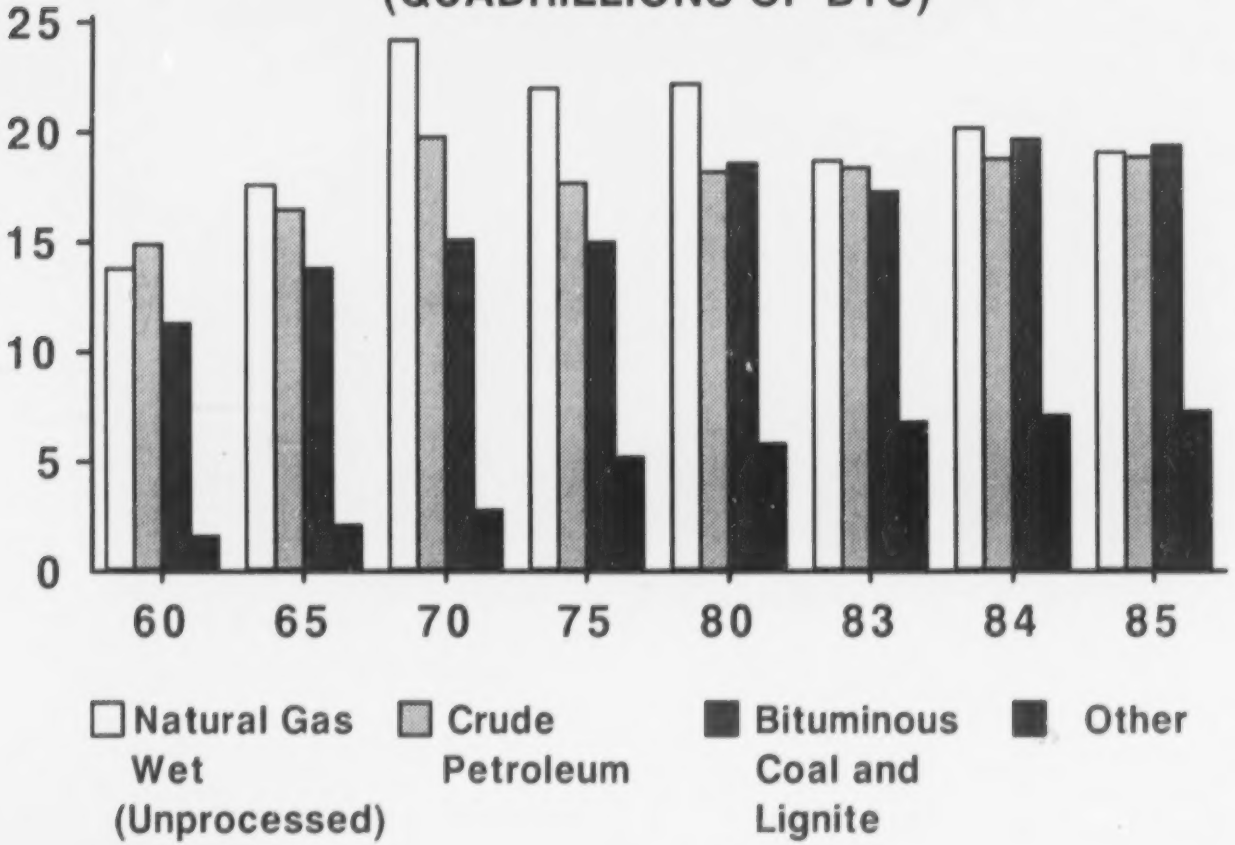
(Percentage)

Year	Natural Gas Wet (unprocessed)	Crude Petroleum	Bituminous Coal and Lignite	Anthracite Coal	Hydro-power	Nuclear	Other[a]	Grand Total Energy
1960	33.2	35.8	26.1	1.1	3.8	b	c	100.0
1965	35.2	33.0	26.8	0.8	4.1	0.1	c	100.0
1970	39.0	32.0	24.0	0.4	4.2	0.4	c	100.0
1971	40.2	32.5	21.7	0.4	4.6	0.6	c	100.0
1972	39.5	31.9	22.8	0.3	4.6	0.9	c	100.0
1973	39.9	31.4	22.5	d	4.6	1.5	.1	100.0
1974	38.9	30.5	23.2	d	5.2	2.1	.1	100.0
1975	36.8	29.6	25.0	d	5.3	3.2	.1	100.0
1976	36.4	28.8	26.2	d	5.0	3.5	.1	100.0
1977	36.4	29.0	26.1	d	3.9	4.5	.1	100.0
1978	35.6	30.2	24.4	d	4.8	4.9	.1	100.0
1979	35.0	28.4	27.5	d	4.6	4.4	.1	100.0
1980	34.2	28.2	28.7	d	4.5	4.2	.2	100.0
1981	34.1	28.2	28.5	d	4.3	4.7	.2	100.0
1982	32.0	28.6	29.2	d	5.1	4.9	.2	100.0
1983	30.6	30.1	28.2	d	5.7	5.2	.2	100.0
1984[R]	30.7	28.5	30.0	d	5.1	5.4	.3	100.0
1985[P]	29.6	29.2	30.0	d	4.5	6.4	.3	100.0

a. Includes geothermal power and electricity produced from wood and waste.
b. Less than 0.05.
c. Not available.
d. Included in "Bituminous Coal and Lignite."
R-Revised. P-Preliminary.
Source: Same as Table 3-1.

CHART 3-1

UNITED STATES ENERGY PRODUCTION (QUADRILLIONS OF BTU)



REFERENCE: TABLE 3-1

TABLE 3-3
SUPPLY AND DISPOSITION OF GAS IN THE UNITED STATES, 1960–1984

(Millions of Cubic Feet)

	Gross Production[a]						Disposition of Marketed Production									
Year	Gas Wells	Oil Wells	Total	Repressuring	Vented and Flared	Marketed Production[b]	Extraction Loss	Lease and Plant Fuel	Net Change in Storage	Pipeline Fuel	Unaccounted For	Nonhydrocarbon Gases	Domestic Dry Production For Sale	Net Imports	Supplemental Supplies	Delivered to Consumers[c]
1960	10,853,426	4,234,485	15,087,911	1,753,996	562,877	12,771,038	1,779,671		131,694	347,075	274,231	d	10,238,367	144,314	d	10,382,681
1961	11,195,087	4,265,225	15,460,312	1,682,754	523,533	13,254,025	1,881,208		145,616	377,607	234,808	d	10,614,786	208,113	d	10,882,899
1962	11,702,382	4,336,591	16,038,973	1,736,722	425,629	13,876,622	1,993,128		86,487	382,496	285,726	d	11,128,785	385,720	d	11,514,505
1963	12,606,022	4,367,346	16,973,368	1,843,297	383,408	14,746,663	2,081,339		130,772	423,783	364,658	d	11,746,111	389,247	d	12,135,358
1964	13,035,200	4,405,100	17,440,300	1,638,161	339,996	15,462,143	2,082,029		128,804	433,204	302,781	d	12,515,325	421,421	d	12,936,746
1965	13,523,600	4,439,500	17,963,100	1,604,204	319,143	16,039,753	1,909,697		118,115	500,524	318,711	d	13,192,706	430,262	d	13,622,968
1966	13,893,921	5,139,918	19,033,839	1,451,516	375,695	17,206,628	1,772,708		68,855	535,353	401,203	d	14,428,509	455,141	d	14,883,650
1967	15,346,853	4,904,923	20,251,776	1,590,574	489,877	18,171,325	784,534	1,140,966	184,829	575,752	296,214	d	15,189,030	482,612	d	15,671,642
1968	16,539,925	4,785,075	21,325,000	1,486,092	516,508	19,322,400	827,877	1,237,131	95,539	590,965	325,062	d	16,245,826	558,140	d	16,803,966
1969	17,489,415	5,189,780	22,679,195	1,455,205	525,750	20,698,240	866,560	1,345,648	119,500	630,962	331,587	d	17,403,983	675,647	d	18,079,630
1970	18,594,658	5,191,795	23,786,453	1,376,351	489,460	21,920,642	906,413	1,398,758	398,160	722,166	227,650	d	18,267,495	750,967	d	19,018,462
1971	18,925,136	5,162,895	24,088,031	1,310,458	284,561	22,493,012	883,127	1,413,650	331,768	742,592	338,999	d	18,782,876	854,336	d	19,637,212
1972	19,042,592	4,973,517	24,016,109	1,236,292	248,119	22,531,698	907,993	1,455,563	135,734	766,156	328,002	d	18,938,250	941,483	d	19,879,733
1973	19,371,600	4,695,602	24,067,202	1,171,361	248,292	22,647,549	916,551	1,495,915	441,504	728,177	195,863	d	18,869,539	955,732	d	19,825,271
1974	18,669,212	4,180,581	22,849,793	1,079,890	169,381	21,600,522	887,490	1,477,386	83,663	668,792	288,731	d	18,194,460	882,495	d	19,076,955
1975	17,380,293	3,723,237	21,103,530	860,956	133,913	20,108,661	872,282	1,396,277	344,054	582,963	235,068	d	16,678,020	880,333	d	17,558,353
1976	17,190,655	3,753,123	20,943,778	859,410	131,930	19,952,438	854,086	1,634,355	(165,327)	548,323	216,240	d	16,864,760	899,058	d	17,763,818
1977	17,415,983	3,681,088	21,097,071	934,801	136,807	20,025,463	862,563	1,659,145	556,631	532,669	41,063	d	16,373,392	955,375	d	17,328,767
1978	17,394,213	3,914,602	21,308,815	1,181,432	153,350	19,974,033	852,130	1,647,911	120,237	530,451	287,201	d	16,536,103	913,013	d	17,449,116
1979	18,033,879	3,849,474	21,883,353	1,245,074	167,019	20,471,260	807,845	1,498,530	248,034	600,964	372,330	d	16,943,557	1,197,710	d	18,141,267
1980	17,572,526	4,297,166	21,869,692	1,365,454	125,451	20,378,787	776,605	1,026,438	(23,269)	634,622	639,559	199,063	17,125,769	935,874	154,590	18,216,233
1981	17,336,862	4,250,591	21,587,453	1,311,735	98,017	20,177,701	774,562	927,591	297,430	642,325	500,501	221,878	16,813,414	844,826	175,702	17,833,942
1982	15,802,614	4,407,314	20,209,928	1,388,392	93,365	18,728,171	761,942	1,109,398	308,199	596,411	474,736	208,492	15,268,993	881,441	144,811	16,295,245
1983	14,146,668	4,450,426	18,597,095	1,458,054	94,962	17,044,081	789,632	978,249	(447,299)	490,042	642,061	221,937	14,369,459	865,268	131,894	15,366,621
1984	15,505,073	4,686,746	20,191,820	1,630,152	107,913	18,453,755	837,867	1,076,881	196,835	528,754	142,600	224,118	15,446,700	788,216	109,977	16,344,893

a. Includes gas (mostly residue gas) blown to the air but does not include direct waste on producing properties, except where data is available.
b. "Marketed Production" equals "Total Gross Production" less "Repressuring" and "Vented and Flared." It includes an allowance for natural gas liquids content in the natural gas and nonhydrocarbon gases.
c. Defined as Domestic Dry Production For Sale plus Net Imports plus Supplemental Gas Supplies. See Table 3-15 for details on Supplemental Gas Supplies.
d. 1980 is the first year this data is available.
( ): Denotes negative.
Sources: U.S. Department of Energy, Energy Information Administration, *Natural Gas Annual*, 1984.
Note: 1985 data reported by U.S. Department of Energy, *Monthly Energy Review*, February 1986 is as follows: "Marketed Production—17,218,000 million of cubic feet (MMcf); "Net Imports"—876,000 MMcf; "Net Change in Underground Storage"—minus 238,000 MMcf.

TABLE 3-4
GAS UTILITY INDUSTRY, GAS SUPPLY AND DISPOSITION, 1960–1985[a]

(Trillions of Btu)

	Amount						
	1960	1965	1970[b]	1975	1980	1984[R]	1985
Supply—Produced and Purchased—Total	**10,544.6**	**13,315.9**	**18,829.5**	**16,811.5**	**17,276.4**	**14,764.6**	**14,130.3**
Natural Gas	10,544.6	13,315.9	18,661.8	16,490.1	16,935.3	14,576.0	13,983.5
Manufactured Gas	c	c	75.6	19.3	8.8	5.2	3.8
Liquefied Petroleum Gas	c	c	26.9	24.8	17.9	5.5	6.5
Substitute Natural Gas	c	c	1.2	261.3	198.4	104.7	75.4
Liquefied Natural Gas	c	c	0.0	8.4	79.6	27.9	24.5
Unclassified	c	c	64.0	7.6	36.4	45.3	36.6
Disposition—Total	**10,544.6**	**13,315.9**	**18,829.5**	**16,811.5**	**17,276.4**	**14,764.6**	**14,130.3**
Used in Production of Other Gases[d]	215.9	126.7	125.4	124.2	95.0	47.4	61.6
Company Use as a Fuel[e]	757.6	995.7	1,380.1	1,089.3	1,278.7	1,138.4	1,107.9
Sales to Ultimate Consumers	9,054.6	11,842.0	16,043.5	14,862.9	15,413.2	13,161.7	12,615.5
Other Deliveries (Net)	54.9	89.6	70.1	83.9	85.8	39.8	132.7
Placed in Storage (Net)	164.7	67.6	473.6	348.8	16.9	176.2	(321.8)
Unaccounted For[f]	296.9	194.3	736.8	302.4	386.8	201.1	534.4

a. Total supply figures involve some double counting. For production of supplementals see Table 3-15.
b. Includes Natural Gas only prior to 1970.
c. Not available.
d. Includes Natural Gas used for enriching, reforming and mixing.
e. Includes interdepartmental transfers.
f. Represents difference between supply and disposition, and should not be interpreted as a reliable measure of transmission efficiency.
R–Revised.

TABLE 3-5
GAS UTILITY INDUSTRY, MAXIMUM AND MINIMUM DAY SENDOUT[a] BY SOURCE OF SUPPLY, 1978–1985[b]

(Trillions of Btu)

	1978	1979	1980	1981	1982	1983	1984	1985
Maximum Day Sendout—Total	**92.1**	**83.8**	**76.1**	**78.8**	**83.6**	**77.4**	**79.7**	**76.6**
Peak Shaving Facilities	3.4	2.0	1.3	2.5	3.4	2.5	1.8	2.7
Underground Storage Withdrawal	36.3	38.3	38.3	37.2	42.4	44.1	38.5	44.2
Regular Production and Purchases	52.4	43.5	36.5	39.1	37.8	30.8	39.4	29.6
Minimum Day Sendout—Total	**16.3**	**17.8**	**16.0**	**16.6**	**13.7**	**13.1**	**13.6**	**12.0**
Average Day Sendout—Total	**40.4**	**42.3**	**42.2**	**42.1**	**38.9**	**35.1**	**36.0**	**34.6**

a. Represents summation of all companies maximum/minimum day sendout, and is non-coincident.
b. Excludes sendout of pipeline companies to avoid duplication. Underground storage withdrawals include amounts from fields operated by both distributors and pipelines.

TABLE 3-6
GROSS PRODUCTION OF NATURAL GAS, BY STATE, 1965-1984[a]

(Millions of Cubic Feet)

Division and State	1965	1970	1975	1980	1982	1983	1984
United States	**17,963,100**	**23,786,453**	**21,103,530**	**21,869,692**	**20,209,928**	**18,597,095**	**20,191,820**
New England	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**88,240**	**80,472**	**92,400**	**113,089**	**139,871**	**139,952**	**193,942**
New Jersey	0	0	0	0	0	0	0
New York	3,340	3,358	7,628	15,650	18,760	21,580	27,600
Pennsylvania	84,900	77,114	84,772	97,439	121,111	118,372	166,342
East North Central	**82,700**	**97,276**	**191,497**	**305,003**	**298,557**	**297,039**	**338,605**
Illinois	7,500	4,972	1,440	1,574	1,162	1,030	1,530
Indiana	2,400	153	346	463	233	135	394
Michigan	36,900	40,038	103,901	164,110	158,771	144,574	150,201
Ohio	35,900	52,113	85,810	138,856	138,391	151,300	186,480
Wisconsin	0	0	0	0	0	0	0
West North Central	**866,900**	**965,535**	**877,137**	**791,315**	**489,373**	**510,693**	**550,921**
Iowa	0	0	0	0	0	0	0
Kansas	806,800	904,475	846,164	737,246	430,889	436,044	467,382
Minnesota	0	0	0	0	0	0	0
Missouri	b	b	30	0	0	0	4
Nebraska	12,100	6,309	3,963	2,550	2,280	2,091	2,300
North Dakota	48,000	54,751	26,941	50,321	53,819	70,428	78,752
South Dakota	0	b	39	1,198	2,385	2,130	2,483
South Atlantic	**211,060**	**246,599**	**205,683**	**210,852**	**184,163**	**157,811**	**166,585**
Delaware	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	b	b	44,383	46,421	26,397	23,356	13,867
Georgia	0	0	0	0	0	0	0
Maryland	408	813	93	68	36	31	60
North Carolina	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0
Virginia	3,152	2,805	6,723	7,812	6,880	4,346	8,928
West Virginia	207,500	242,981	154,484	156,551	150,850	130,078	143,730
East South Central	**277,300**	**234,912**	**192,544**	**385,362**	**409,894**	**378,543**	**412,235**
Alabama	b	b	38,921	111,836	133,298	125,889	136,427
Kentucky	79,100	77,892	60,511	57,180	51,924	46,720	61,518
Mississippi	198,200	157,020	92,500	215,105	221,696	201,984	209,268
Tennessee	b	b	612	1,241	2,976	3,950	5,022
West South Central	**14,022,900**	**19,469,337**	**17,073,397**	**16,810,823**	**15,276,762**	**13,692,350**	**14,748,981**
Arkansas	104,000	183,650	121,518	127,696	149,862	153,911	162,744
Louisiana	4,764,300	8,076,157	7,242,408	7,008,489	6,216,868	5,379,359	5,888,043
Oklahoma	1,414,000	1,811,004	1,720,698	2,018,577	1,934,412	1,730,061	1,985,869
Texas	7,740,600	9,398,526	7,988,773	7,656,061	6,975,620	6,429,019	6,712,325
Mountain	**1,492,500**	**1,744,236**	**1,849,992**	**1,952,333**	**1,842,659**	**1,746,688**	**1,996,753**
Arizona	b	b	255	357	261	240	227
Colorado	155,200	115,157	174,145	191,806	214,933	172,842	180,616
Idaho	0	0	0	0	0	0	0
Montana	29,800	48,302	44,547	53,802	58,184	53,516	52,930
Nevada	0	0	0	0	0	0	0
New Mexico	956,500	1,141,889	1,227,200	1,168,049	1,009,883	917,158	978,236
Utah	92,100	73,386	77,607	87,766	94,255	63,158	184,606
Wyoming	258,900	365,502	326,238	450,553	465,143	539,774	600,138
Pacific	**917,800**	**945,099**	**620,880**	**1,300,915**	**1,568,649**	**1,674,019**	**1,783,798**
Alaska	12,800	217,854	253,227	893,759	1,084,732	1,164,602	1,206,370
California	905,000	727,245	367,653	407,151	483,914	509,414	574,638
Hawaii	0	0	0	0	0	0	0
Oregon	0	0	0	5	3	3	2,790
Washington	0	0	0	0	0	0	0
Other States	**3,700**	**2,987**	**0**	**0**	**0**	**0**	**0**

a. Includes gas (mostly residue gas) blown to the air, but does not include direct waste on producing properties, except where data is available.
b. Included in "Other States."
Source: U.S. Department of Energy, Energy Information Administration, *Natural Gas Annual*, 1984.

TABLE 3-7
NET WELLHEAD PRODUCTION OF NATURAL GAS, BY STATE, 1965-1984[a]

(Millions of Cubic Feet)

Division and State	1965	1970	1975	1980	1982	1983	1984
United States	**16,358,896**	**22,410,102**	**20,242,574**	**20,504,238**	**18,821,536**	**17,139,041**	**18,561,668**
New England	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**87,842**	**80,199**	**92,400**	**113,089**	**139,871**	**139,952**	**193,942**
New Jersey	0	0	0	0	0	0	0
New York	3,340	3,358	7,628	15,650	18,760	21,580	27,600
Pennsylvania	84,502	76,841	84,772	97,439	121,111	118,372	166,342
East North Central	**80,800**	**96,898**	**190,471**	**302,628**	**296,157**	**294,699**	**336,265**
Illinois	7,500	4,972	1,440	1,574	1,162	1,030	1,530
Indiana	2,400	153	346	463	233	135	394
Michigan	35,000	39,660	103,725	161,735	156,371	142,234	147,861
Ohio	35,900	52,113	84,960	138,856	138,391	151,300	186,480
Wisconsin	b	0	0	0	0	0	0
West North Central	**860,204**	**963,410**	**875,409**	**789,841**	**488,512**	**509,508**	**549,615**
Iowa	0	0	0	0	0	0	0
Kansas	806,683	902,668	844,471	735,772	430,028	435,172	466,447
Minnesota	0	0	0	0	0	0	0
Missouri	b	b	30	0	0	0	4
Nebraska	11,985	5,991	3,963	2,550	2,280	2,091	2,300
North Dakota	41,536	54,751	26,941	50,321	53,819	70,315	78,752
South Dakota	0	b	5	1,198	2,385	1,930	2,112
South Atlantic	**211,044**	**246,070**	**205,683**	**210,852**	**183,069**	**157,811**	**166,585**
Delaware	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	b	b	44,383	46,421	25,303	23,356	13,867
Georgia	0	0	0	0	0	0	0
Maryland	408	813	93	68	36	31	60
North Carolina	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0
Virginia	3,152	2,805	6,723	7,812	6,880	4,346	8,928
West Virginia	207,484	242,452	154,484	156,551	150,850	130,078	143,730
East South Central	**255,601**	**211,156**	**186,251**	**369,219**	**392,823**	**360,453**	**391,890**
Alabama	b	b	38,921	108,702	124,994	114,847	123,870
Kentucky	79,100	77,892	60,511	57,180	51,924	46,720	61,518
Mississippi	176,501	133,264	86,207	202,096	212,929	194,936	201,480
Tennessee	b	b	612	1,241	2,976	3,950	5,022
West South Central	**12,769,359**	**18,306,535**	**16,387,930**	**16,273,072**	**14,868,441**	**13,291,330**	**14,311,030**
Arkansas	83,845	181,577	117,555	112,202	125,584	128,535	137,385
Louisiana	4,589,349	7,942,365	7,116,104	6,962,775	6,191,409	5,357,763	5,850,063
Oklahoma	1,356,738	1,724,572	1,637,212	1,917,379	1,934,412	1,730,061	1,985,869
Texas	6,739,427	8,458,021	7,517,059	7,280,716	6,617,036	6,074,971	6,337,713
Mountain	**1,416,853**	**1,705,299**	**1,813,914**	**1,898,955**	**1,794,925**	**1,686,671**	**1,830,208**
Arizona	b	b	255	357	261	240	227
Colorado	131,342	112,930	174,145	191,610	214,706	172,454	180,522
Idaho	0	0	0	0	0	0	0
Montana	29,221	47,908	43,936	53,572	58,461	53,516	52,759
Nevada	0	0	0	0	0	0	0
New Mexico	945,794	1,141,889	1,219,072	1,154,992	997,544	903,399	965,716
Utah	72,306	45,633	57,160	87,766	94,255	63,158	77,137
Wyoming	238,190	356,939	319,346	410,658	429,975	493,904	553,847
Pacific	**673,493**	**798,000**	**490,516**	**546,582**	**657,738**	**698,617**	**782,133**
Alaska	7,331	146,384	170,671	235,408	271,311	281,718	300,799
California	666,162	651,616	319,845	311,169	386,424	416,896	478,544
Hawaii	0	0	0	0	0	0	0
Oregon	0	0	0	5	3	3	2,790
Washington	0	0	0	0	0	0	0
Other States	**3,700**	**2,535**	**0**	**0**	**0**	**0**	**0**

a. As defined by A.G.A. "Net Wellhead Production" equals "Gross Production" less gas for repressuring (see Table 3-3) and therefore includes natural gas liquids.
b. Included in "Other States."
Source: U.S. Department of Energy, Energy Information Administration, *Natural Gas Annual*, 1984.

TABLE 3-8
MARKETED PRODUCTION OF NATURAL GAS, BY STATE, 1965-1984[a]

(Millions of Cubic Feet)

Division and State	1965	1970	1975	1980	1982	1983	1984
United States	**16,039,753**	**21,920,642**	**20,108,661**	**20,378,787**	**18,728,171**	**17,044,081**	**18,453,756**
New England	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**87,801**	**80,199**	**92,304**	**113,082**	**136,988**	**136,208**	**191,542**
New Jersey	0	0	0	0	0	0	0
New York	3,340	3,358	7,628	15,643	15,877	17,836	25,200
Pennsylvania	84,461	76,841	84,676	97,439	121,111	118,372	166,342
East North Central	**77,877**	**95,967**	**188,859**	**299,195**	**292,837**	**291,375**	**332,941**
Illinois	7,396	4,850	1,440	1,574	1,162	1,030	1,530
Indiana	239	153	346	463	233	135	394
Michigan	34,558	38,851	102,113	158,302	153,051	138,910	144,537
Ohio	35,684	52,113	84,960	138,856	138,391	151,300	186,480
Wisconsin	0	0	0	0	0	0	0
West North Central	**839,751**	**940,922**	**871,006**	**781,124**	**488,026**	**507,992**	**546,964**
Iowa	0	0	0	0	0	0	0
Kansas	793,379	899,955	843,625	735,035	429,597	434,736	465,979
Minnesota	0	0	0	0	0	0	0
Missouri	b	87	30	0	0	0	4
Nebraska	10,720	5,991	2,565	2,550	2,280	2,091	2,300
North Dakota	35,652	34,889	24,786	42,346	53,818	69,319	76,734
South Dakota	b	0	0	1,193	2,331	1,846	1,947
South Atlantic	**210,976**	**246,070**	**205,683**	**210,175**	**182,634**	**157,614**	**166,524**
Delaware	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	b	0	44,383	45,744	24,868	23,159	13,833
Georgia	0	0	0	0	0	0	0
Maryland	408	813	93	68	36	31	60
North Carolina	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0
Virginia	3,152	2,805	6,723	7,812	6,880	4,346	8,901
West Virginia	207,416	242,452	154,484	156,551	150,850	130,078	143,730
East South Central	**245,801**	**204,614**	**172,697**	**349,417**	**379,218**	**349,965**	**380,199**
Alabama	b	627	37,814	105,527	122,188	113,053	122,041
Kentucky	78,976	77,892	60,511	57,180	51,924	46,720	61,518
Mississippi	166,825	126,031	74,345	185,469	202,130	186,242	191,618
Tennessee	b	64	27	1,241	2,976	3,950	5,022
West South Central	**12,507,167**	**17,922,286**	**16,298,056**	**16,195,435**	**14,814,626**	**13,236,287**	**14,251,542**
Arkansas	82,831	181,351	116,237	111,808	124,611	127,561	135,161
Louisiana	4,466,786	7,788,276	7,090,645	6,939,924	6,171,628	5,332,113	5,825,055
Oklahoma	1,320,995	1,594,943	1,605,410	1,891,824	1,934,412	1,730,061	1,985,869
Texas	6,636,555	8,357,716	7,485,764	7,251,879	6,583,975	6,046,552	6,305,457
Mountain	**1,399,156**	**1,669,891**	**1,801,478**	**1,889,983**	**1,784,957**	**1,672,185**	**1,815,697**
Arizona	b	1,101	208	214	99	132	45
Colorado	126,381	105,804	171,629	190,814	213,483	171,094	179,522
Idaho	0	0	0	0	0	0	0
Montana	28,105	42,705	40,734	51,867	56,517	51,967	51,474
Nevada	0	0	0	0	0	0	0
New Mexico	937,205	1,138,980	1,217,430	1,149,781	992,777	897,163	959,382
Utah	71,616	42,781	55,354	87,766	94,255	63,158	74,698
Wyoming	235,849	338,520	316,123	409,541	427,826	488,671	550,576
Pacific	**667,639**	**760,693**	**478,578**	**540,376**	**648,885**	**692,455**	**768,347**
Alaska	7,255	111,576	160,270	230,588	264,365	276,691	289,129
California	660,384	649,117	318,308	309,783	384,517	415,761	476,428
Hawaii	0	0	0	0	0	0	0
Oregon	0	0	0	5	3	3	2,790
Washington	0	0	0	0	0	0	0
Other States	**3,585**	**0**	**0**	**0**	**0**	**0**	**0**

a. Includes 199,063 million cubic feet of nonhydrocarbon gases in 1980, 208,492 million cubic feet in 1982, 221,937 million cubic feet in 1983, and 224,118 million cubic feet in 1984.
b. Included in "Other States."
Source: U.S. Department of Energy, Energy Information Administration, *Natural Gas Annual*, 1984.

TABLE 3-9
NATURAL GAS PRODUCTION PURCHASED BY ALL INTERSTATE NATURAL GAS PIPELINE COMPANIES, BY STATE, 1978-1984

(Millions of Cubic Feet)

Division and State	1978	1979	1980	1981	1982	1983	1984
Total United States	**10,865,478**	**11,535,967**	**11,604,272**	**11,959,310**	**10,933,412**	**9,496,902**	**10,421,625**
New England	0	0	0	0	0	0	0
Middle Atlantic	**33,945**	**34,422**	**44,577**	**70,818**	**80,820**	**74,779**	**82,081**
New Jersey	0	0	0	0	0	0	0
New York	1,812	5,385	2,729	8,606	8,167	9,187	14,368
Pennsylvania	32,133	29,037	41,848	62,212	72,653	65,592	67,713
East North Central	**23,644**	**25,474**	**44,858**	**47,535**	**50,278**	**57,895**	**53,984**
Illinois	192	186	241	195	476	234	217
Indiana	33	166	9,587	6,162	38	8	0
Michigan	0	0	0	0	0	0	0
Ohio	23,419	25,122	35,030	41,178	49,764	57,653	53,767
Wisconsin	0	0	0	0	0	0	0
West North Central	**712,958**	**672,123**	**589,922**	**499,186**	**341,751**	**336,984**	**405,312**
Iowa	0	0	0	0	0	0	0
Kansas	698,190	653,468	566,379	472,067	310,949	299,843	379,346
Minnesota	0	0	0	0	0	0	3,335
Missouri	0	0	0	0	0	0	0
Nebraska	3,565	3,645	3,322	3,561	2,944	3,004	3,547
North Dakota	11,203	14,168	19,103	22,390	25,996	32,834	18,267
South Dakota	0	842	1,118	1,168	1,862	1,303	817
South Atlantic	**161,064**	**157,408**	**165,947**	**175,378**	**162,179**	**139,596**	**161,704**
Delaware	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	18,439	17,821	14,996	9,659	7,724	6,385	2,915
Georgia	0	0	0	0	0	0	0
Maryland	98	79	71	59	37	31	60
North Carolina	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0
Virginia	8,542	8,587	7,818	8,897	6,905	4,323	8,976
West Virginia	133,985	130,921	143,062	156,763	147,513	128,857	149,753
East South Central	**125,339**	**161,859**	**195,980**	**216,027**	**201,350**	**201,611**	**227,437**
Alabama	13,259	17,310	36,592	40,867	38,953	30,079	33,653
Kentucky	50,590	40,859	47,555	50,042	38,527	32,661	47,238
Mississippi	61,490	103,690	111,833	125,086	123,586	135,058	142,509
Tennessee	0	0	0	32	284	3,813	4,037
West South Central	**8,376,897**	**8,982,014**	**9,068,369**	**9,346,583**	**8,689,062**	**7,413,344**	**8,188,459**
Arkansas	87,808	77,210	71,596	67,143	87,761	79,162	83,534
Louisiana	5,146,714	5,210,191	5,161,204	5,264,477	4,759,426	4,031,576	4,562,678
Oklahoma	857,564	944,622	953,838	1,001,138	1,118,021	888,113	986,368
Texas	2,284,811	2,749,991	2,881,731	3,013,825	2,723,854	2,414,493	2,555,879
Mountain	**1,411,763**	**1,502,667**	**1,494,619**	**1,603,783**	**1,407,972**	**1,272,693**	**1,302,648**
Arizona	0	0	0	0	0	0	0
Colorado	150,425	155,079	157,385	158,639	160,839	122,040	116,262
Idaho	0	0	0	524	78	0	0
Montana	23,190	36,908	30,458	33,701	31,842	31,658	24,351
Nevada	0	0	0	0	0	0	0
New Mexico	954,919	969,836	936,305	1,003,163	806,724	713,159	736,216
Utah	38,208	41,519	49,990	63,537	70,855	53,165	52,752
Wyoming	245,021	299,325	320,481	344,219	337,634	352,671	373,066
Pacific	0	0	0	0	0	0	0
Undifferentiated[a]	**19,868**	0	0	0	0	0	0

a. Production not separable by FERC gas areas.

Source: U.S. Department of Energy, Energy Information Administration, *Gas Supplies of Interstate Natural Gas Pipeline Companies*, 1984.

TABLE 3-10
TOTAL OFFSHORE PRODUCTION OF NATURAL GAS AND PERCENT STATE/FEDERALLY CONTROLLED, BY STATE, 1960--1985

	Alaska			California			Louisiana			Texas			Total		
		Percent			Percent			Percent			Percent			Percent	
Year	MMcf	State	OCS	MMcf	State	OCS	MMcf	State	OCS	MMcf	State	OCS	MMcf	State	OCS
1960	—	—	—	1,113	100	—	376,093	27	73	30,960	100	—	408,166	33	67
1961	—	—	—	5,903	100	—	431,364	26	74	13,760	100	—	451,027	29	71
1962	—	—	—	10,671	100	—	578,032	22	78	41,280	100	—	629,983	28	72
1963	—	—	—	25,769	100	—	703,230	20	80	30,960	100	—	759,959	26	74
1964	—	—	—	35,323	100	—	773,559	20	80	30,960	100	—	839,842	26	74
1965 R	11	100	—	40,770	100	—	862,738	25	75	27,520	100	—	931,038	31	69
1966	1,200	100	—	46,839	100	—	1,248,237	23	77	63,682	29	71	1,359,958	26	74
1967	9,046	100	—	46,732	100	—	1,482,622	27	73	160,798	22	78	1,699,198	30	70
1968 R	25,807	100	—	86,565	99	1	1,906,483	26	74	300,689	29	71	2,319,543	34	66
1969	43,243	100	—	83,904	94	6	2,380,225	23	77	238,056	47	53	2,745,429	29	71
1970	83,140	100	—	71,121	83	17	2,868,466	21	79	264,661	50	50	3,287,388	26	74
1971 R	86,326	100	—	61,448	74	26	3,207,475	18	82	235,600	67	33	3,590,850	23	77
1972	76,819	100	—	44,781	78	22	3,485,003	17	83	277,282	47	53	3,883,885	22	78
1973	74,655	100	—	37,883	81	19	3,612,878	15	85	251,038	41	59	3,976,454	19	81
1974	74,672	100	—	34,505	84	16	3,867,751	13	87	269,577	41	59	4,246,505	17	83
1975 R	76,295	100	—	27,272	85	15	3,840,631	13	87	220,530	44	56	4,164,727	17	83
1976	74,143	100	—	22,459	84	16	4,012,801	13	87	205,993	55	45	4,315,396	17	83
1977	77,540	100	—	17,527	81	19	4,133,610	12	88	268,250	68	32	4,496,927	17	83
1978 R	74,910	100	—	17,668	80	20	4,639,460	11	89	402,000	42	58	5,134,039	15	85
1979	73,792	100	—	16,417	82	18	4,635,487	10	90	719,208	29	71	5,444,904	14	86
1980 R	64,543	100	—	16,182	81	19	4,422,492	9	91	879,020	29	71	5,382,236	14	86
1981 R	72,307	100	—	26,237	51	49	4,480,934	8	92	966,983	24	76	5,546,462	12	88
1982 R	68,372	100	—	31,758	44	56	4,163,089	9	91	1,104,987	22	78	5,368,207	13	87
1983 R	68,837	100	—	29,878	46	54	3,490,146	9	91	998,951	15	85	4,587,812	12	88
1984	68,688	100	—	41,643	33	67	3,892,103	8	92	1,043,384	11	89	5,045,819	10	90
1985 P	62,795	100	—	49,164	28	72	3,346,856	7	93	943,057	11	89	4,401,872	11	89

R—Revised. P—Preliminary.
Source: U.S. Department of the Interior, Minerals Management Service, *Federal Offshore Statistics.*
Note: Totals may not add due to independent rounding.

TABLE 3-11
INTERSTATE MOVEMENTS AND MOVEMENTS ACROSS U.S. BORDERS OF NATURAL AND SUPPLEMENTAL GAS, 1984[a]

(Millions of Cubic Feet)

Division and State	Interstate Movements			Movements Across U.S. Borders		
	Receipts	Deliveries	Net	Receipts[b]	Deliveries[c]	Net
United States	**47,871,766**	**47,871,766**	**0**	**1,129,705**	**341,488**	**788,217**
New England	**549,795**	**244,058**	**305,737**	**41,185**	**0**	**41,185**
Connecticut	196,625	115,489	81,136	0	0	0
Maine	2,537	0	2,537	0	0	0
Massachusetts	213,871	34,388	179,483	36,191	0	36,191
New Hampshire	12,709	2,343	10,366	0	0	0
Rhode Island	124,053	91,838	32,215	0	0	0
Vermont	0	0	0	4,994	0	4,994
Middle Atlantic	**4,158,845**	**2,414,402**	**1,744,443**	**29,326**	**0**	**29,326**
New Jersey	994,404	558,792	435,612	0	0	0
New York	1,031,511	320,448	711,063	29,326	0	29,326
Pennsylvania	2,132,930	1,535,162	597,768	0	0	0
East North Central	**7,330,242**	**4,150,653**	**3,179,589**	**3,683**	**265,904**	**(262,221)**
Illinois	2,024,163	1,016,321	1,007,842	0	0	0
Indiana	1,588,849	1,155,902	432,947	0	0	0
Michigan	833,598	0	833,598	3,683	265,904	(262,221)
Ohio	2,215,520	1,615,523	599,997	0	0	0
Wisconsin	668,112	362,907	305,205	0	0	0
West North Central	**5,602,291**	**5,313,609**	**288,682**	**475,985**	**8,011**	**469,974**
Iowa	1,072,542	840,337	232,205	0	0	0
Kansas	1,362,932	1,465,318	(102,386)	0	0	0
Minnesota	332,380	571,221	(238,841)	475,985	8,011	469,974
Missouri	1,375,373	1,101,511	273,862	0	0	0
Nebraska	1,165,283	1,032,214	133,069	0	0	0
North Dakota	136,005	168,575	(32,570)	0	0	0
South Dakota	157,776	134,433	23,343	0	0	0
South Atlantic	**6,475,204**	**5,366,069**	**1,109,135**	**0**	**0**	**0**
Delaware	44,886	2,071	42,815	0	0	0
District of Columbia	30,214	0	30,214	0	0	0
Florida	299,632	960	298,672	0	0	0
Georgia	1,274,720	970,146	304,574	0	0	0
Maryland	768,952	617,953	150,999	0	0	0
North Carolina	856,551	713,188	143,363	0	0	0
South Carolina	963,059	856,551	106,508	0	0	0
Virginia	926,054	785,589	140,465	0	0	0
West Virginia	1,311,136	1,419,611	(108,475)	0	0	0
East South Central	**14,074,856**	**13,386,849**	**688,007**	**0**	**0**	**0**
Alabama	2,791,263	2,649,691	141,572	0	0	0
Kentucky	2,999,015	2,808,010	191,005	0	0	0
Mississippi	5,077,761	4,924,788	152,973	0	0	0
Tennessee	3,206,817	3,004,360	202,457	0	0	0
West South Central	**5,044,037**	**12,593,710**	**(7,549,673)**	**51,502**	**29**	**51,473**
Arkansas	2,285,386	2,185,420	99,966	0	0	0
Louisisna	1,459,954	5,537,465	(4,077,511)	0	0	0
Oklahoma	573,477	1,735,343	(1,161,866)	0	0	0
Texas	725,220	3,135,482	(2,410,262)	51,502	29	51,473
Mountain	**2,710,241**	**3,872,283**	**(1,162,012)**	**437,021**	**13,702**	**423,318**
Arizona	1,205,626	1,071,352	134,274	0	1,757	(1,757)
Colorado	395,292	332,406	62,886	0	0	0
Idaho	106,622	367,032	(260,410)	299,360	0	299,360
Montana	42,181	149,288	(107,107)	137,661	11,945	125,715
Nevada	42,309	2,311	39,998	0	0	0
New Mexico	660,003	1,356,584	(696,581)	0	0	0
Utah	68,944	83,569	(14,625)	0	0	0
Wyoming	189,264	509,711	(320,447)	0	0	0
Pacific	**1,926,255**	**530,165**	**1,396,090**	**91,003**	**53,842**	**37,161**
Alaska	0	0	0	0	52,840	(52,840)
California	1,277,119	0	1,277,119	0	0	0
Hawaii	0	0	0	0	0	0
Oregon	328,291	251,744	76,547	0	0	0
Washington	320,845	278,421	42,424	91,003	1,002	90,001

a. Supplemental Gas Supplies totaled 109,977 million cubic feet. See Table 3-15.
b. For detail by country see Table 3-13.
c. For detail by country see Table 3-12.
Source: U.S. Department of Energy, Energy Information Administration, *Natural Gas Annual*, 1984.

TABLE 3-12
EXPORTS OF NATURAL GAS FROM THE UNITED STATES, 1960-1985

(Millions of Cubic Feet)

Year	Total	Canada	Mexico	Japan[a]
1960[R]	11,332	5,759	5,573	0
1965[R]	26,132	17,979	8,153	0
1966[R]	24,639	20,281	4,358	0
1967[R]	81,614	70,456	11,158	0
1968	93,745	81,647	12,098	0
1969[R]	51,304	34,931	13,391	2,982
1970[R]	69,831	10,878	14,678	44,257
1971[R]	80,212	14,349	15,632	50,231
1972	78,014	15,553	14,579	47,882
1973	77,169	14,824	13,999	48,346
1974	76,789	13,263	13,268	50,258
1975	72,675	10,219	9,454	53,002
1976	64,710	7,506	7,425	49,779
1977	55,626	31	3,940	51,655
1978	52,533	66	4,033	48,434
1979	55,673	76	4,308	51,289
1980	48,731	113	3,886	44,732
1981	59,372	106	3,337	55,929
1982	51,728	162	1,705	49,861
1983[R]	54,639	136	1,646	52,857
1984	54,753	127	1,786	52,840
1985	55,268	178	2,207	52,883

a. LNG exports from Alaska.
R - Revised.
Source: U.S. Department of Energy, Energy Information Administration, *Natural Gas Monthly*.

TABLE 3-13
IMPORTS OF NATURAL GAS TO THE UNITED STATES, 1960-1985

(Millions of Cubic Feet)

Year	Total	Canada	Mexico	Algeria[a]
1960[R]	155,646	108,657	46,989	0
1965[R]	456,394	404,686	51,708	0
1966[R]	479,780	430,189	49,591	0
1967[R]	564,226	513,255	50,971	0
1968	651,885	604,462	47,423	0
1969[R]	726,951	680,106	46,845	0
1970[R]	820,780	778,687	41,336	757
1971[R]	934,548	912,426	20,689	1,433
1972[R]	1,019,496	1,009,323	8,140	2,032
1973[R]	1,032,901	1,027,883	1,632	3,388
1974[R]	959,284	959,063	222	0
1975[R]	953,008	948,115	0	4,893
1976	963,768	953,613	0	10,155
1977[R]	1,011,002	997,295	2,384	11,324
1978	965,545	881,123	0	84,422
1979	1,253,383	1,000,775	0	252,608
1980	984,767	796,507	102,410	85,850
1981[R]	903,949	762,113	105,013	36,824
1982	933,336	783,407	94,794	55,136
1983[R]	918,407	711,923	75,361	131,124
1984[R]	843,060	755,368	51,502	36,191
1985	949,715	926,056	0	23,659

a. Quantities represent total LNG imports from overseas into the U.S.
R - Revised.
Source: U.S. Department of Energy, Energy Information Administration, *Natural Gas Monthly*.

TABLE 3-14
NATURAL GAS DELIVERED TO CONSUMERS BY STATE, 1965-1984[a]

(Millions of Cubic Feet)

Division and State	1965	1970	1975	1980	1982	1983	1984[b]
United States	**13,622,968**	**19,018,462**	**17,558,353**	**18,216,233**	**16,295,245**	**15,366,621**	**16,344,893**
New England	**175,051**	**242,807**	**254,070**	**297,506**	**315,775**	**310,285**	**337,857**
Connecticut	40,722	60,524	63,968	72,512	77,591	74,211	80,924
Maine	0	10,691[c]	13,534[c]	2,166	2,617	2,419	2,444
Massachusetts	113,994	146,226	153,461	181,912	193,506	190,782	207,564
New Hampshire	4,084	d	d	9,448	9,993	9,635	10,506
Rhode Island	16,251	25,066	23,107	27,477	27,702	28,884	31,557
Vermont	0	d	d	3,991	4,366	4,354	4,862
Middle Atlantic	**1,357,337**	**1,772,600**	**1,451,698**	**1,818,067**	**1,805,562**	**1,732,089**	**1,837,082**
New Jersey	209,306	321,910	243,714	339,358	374,702	404,398	415,852
New York	540,672	707,219	573,699	733,800	770,665	716,488	784,243
Pennsylvania	607,359	743,471	634,285	744,909	660,195	611,203	636,987
East North Central	**2,706,665**	**3,843,966**	**3,718,831**	**3,628,619**	**3,262,711**	**3,054,656**	**3,231,263**
Illinois	742,906	1,145,379	1,080,787	1,074,771	974,545	923,921	1,017,180
Indiana	349,827	534,214	467,736	480,346	459,114	421,252	446,210
Michigan	548,390	795,317	865,539	846,278	725,050	680,452	698,672
Ohio	866,589	1,037,801	944,925	883,613	795,963	732,686	767,095
Wisconsin	198,953	331,255	359,844	343,611	308,039	296,345	302,106
West North Central	**1,398,950**	**1,826,005**	**1,686,051**	**1,455,928**	**1,255,961**	**1,149,713**	**1,199,852**
Iowa	236,443	330,363	329,703	256,900	228,229	212,587	224,314
Kansas	385,364	481,483	402,273	411,494	317,259	276,262	287,328
Minnesota	247,561	334,872	327,315	276,717	253,359	236,401	249,040
Missouri	332,219	416,783	362,130	312,872	274,897	254,823	259,904
Nebraska	155,359	207,550	207,371	152,283	132,933	125,134	129,745
North Dakota	15,069	18,645	24,757	21,660	24,374	21,368	25,109
South Dakota	26,935	36,309	32,502	24,002	24,910	23,138	24,412
South Atlantic	**909,869**	**1,465,035**	**1,268,171**	**1,390,415**	**1,290,529**	**1,256,665**	**1,303,188**
Delaware	17,969	26,421	18,603	29,797	27,799	34,873	42,957
District of Columbia	e	e	e	27,868	28,922	28,952	29,054
Florida	182,093	332,223	271,471	304,638	310,076	293,623	291,128
Georgia	206,560	325,650	322,383	307,827	287,463	289,574	301,331
Maryland	113,963[f]	179,784[f]	163,462[f]	156,300	155,507	143,527	156,868
North Carolina	71,473	145,076	111,276	147,448	135,482	130,792	138,228
South Carolina	84,564	156,559	120,308	139,214	95,220	98,998	105,842
Virginia	88,907	128,492	118,083	149,980	139,840	135,611	136,757
West Virginia	144,360	170,830	142,585	127,343	110,220	100,715	101,023
East South Central	**727,845**	**1,009,983**	**809,664**	**856,158**	**794,910**	**741,706**	**798,830**
Alabama	216,998	278,414	245,287	242,793	220,087	203,687	213,516
Kentucky	142,438	209,991	182,781	180,368	159,446	151,187	162,985
Mississippi	189,603	293,156	183,807	219,828	224,857	203,222	228,840
Tennessee	178,806	228,424	197,789	213,169	190,520	183,608	193,489
West South Central	**3,848,796**	**5,545,215**	**5,332,025**	**5,873,159**	**4,869,844**	**4,637,354**	**4,967,311**
Arkansas	255,637	359,338	241,803	260,319	213,187	194,079	193,694
Louisiana	857,118	1,482,275	1,425,686	1,523,691	1,156,364	1,090,109	1,241,850
Oklahoma	389,314	475,974	565,387	639,642	556,481	525,165	533,712
Texas	2,346,727	3,227,628	3,099,149	3,449,507	2,943,812	2,828,001	2,998,055
Mountain	**787,368**	**1,020,744**	**982,840**	**842,444**	**731,854**	**668,119**	**693,082**
Arizona	136,297	168,994	139,130	144,511	116,536	102,807	107,434
Colorado	219,602	277,739	294,760	241,765	202,482	195,702	211,752
Idaho	32,831	42,367	56,182	44,835	36,870	32,412	34,977
Montana	64,320	81,992	75,441	54,460	47,887	42,634	42,914
Nevada	27,679	52,558	61,251	58,284	46,303	41,830	42,173
New Mexico	130,072	191,818	172,638	146,579	113,564	100,727	101,869
Utah	105,524	120,814	116,620	106,647	110,615	104,429	106,188
Wyoming	41,043	84,462	66,818	45,363	57,597	47,578	45,775
Pacific	**1,741,087**	**2,292,407**	**2,055,003**	**2,053,937**	**1,968,088**	**1,816,041**	**1,976,425**
Alaska	5,917	41,672	66,815	122,966	143,395	141,116	140,535
California	1,572,367	2,017,393	1,727,729	1,729,650	1,647,535	1,502,575	1,633,122
Hawaii	0	0	0	3,131	2,804	2,669	2,375
Oregon	55,383	89,776	101,980	73,083	67,412	64,042	75,958
Washington	107,420	143,566	158,479	125,107	106,942	105,639	124,435

a. Includes deliveries made directly to end users in addition to gas utility sales as shown in Table 6-7.
b. Includes 109,977 million cubic feet (MMcf) of Supplemental Gas Supplies, less 224,118 MMcf of Nonhydrocarbon Gases.
c. Includes New Hampshire and Vermont.
d. Included in Maine.
e. Included in Maryland.
f. Includes District of Columbia.

Sources: U.S. Department of Energy, Energy Information Administration, *Natural Gas Annual*, 1984.

GAS FACTS

TABLE 3-15
SUPPLEMENTAL GAS SUPPLIES BY STATE, 1984

(Millions of Cubic Feet)

Division and State	Total	Synthetic Natural Gas	Propane-Air	Refinery Gas	Other[a]
United States	**109,977**	**78,632**	**4,118**	**8,782**	**18,445**
New England	**7,567**	**5,843**	**1,708**	**15**	**0**
Connecticut	239	0	239	0	0
Maine	0	0	0	0	0
Massachusetts	6,545	5,843	686	15	0
New Hampshire	681	0	681	0	0
Rhode Island	102	0	102	0	0
Vermont	0	0	0	0	0
Middle Atlantic	**10,490**	**852**	**576**	**7,780**	**1,281[b,c]**
New Jersey	8,616	273	465	7,778	100[b]
New York	1,792	578	33	0	1,181[c]
Pennsylvania	82	1	78	2	0
East North Central	**67,980**	**61,012**	**633**	**986**	**5,348[d,f]**
Illinois	17,308	17,165	129	14	0
Indiana	4,027	0	479	972	2,575[d]
Michigan	2,773	0	e	0	2,773[f]
Ohio	43,866	43,847	19	0	0
Wisconsin	6	0	6	0	0
West North Central	**11,187**	**8,335**	**330**	**0**	**2,522[c,f]**
Iowa	53	0	0	0	53[c]
Kansas	0	0	0	0	0
Minnesota	3	0	3	0	0
Missouri	326	0	326	0	0
Nebraska	2,470	0	1	0	2,469[f]
North Dakota	8,335	8,335	e	0	0
South Dakota	e	0	e	0	0
South Atlantic	**704**	**141**	**414**	**0**	**148[c]**
Delaware	13	0	13	0	0
District of Columbia	0	0	0	0	0
Florida	0	0	0	0	0
Georgia	28	0	28	0	0
Maryland	332	92	91	0	148[c]
North Carolina	60	0	60	0	0
South Carolina	62	0	62	0	0
Virginia	209	49	160	0	0
West Virginia	0	0	0	0	0
East South Central	**173**	**0**	**173**	**0**	**0**
Alabama	54	0	54	0	0
Kentucky	94	0	94	0	0
Mississippi	0	0	0	0	0
Tennessee	25	0	25	0	0
West South Central	**2**	**0**	**2**	**0**	**0**
Arkansas	0	0	0	0	0
Louisiana	0	0	0	0	0
Oklahoma	0	0	0	0	0
Texas	2	0	2	0	0
Mountain	**9,410**	**0**	**264**	**0**	**9,146[f]**
Arizona	0	0	0	0	0
Colorado	9,137	0	4	0	9,133[f]
Idaho	0	0	0	0	0
Montana	0	0	0	0	0
Nevada	2	0	2	0	0
New Mexico	0	0	0	0	0
Utah	0	0	0	0	0
Wyoming	271	0	258	0	13[f]
Pacific	**2,466**	**2,449**	**17**	**0**	**0**
Alaska	0	0	0	0	0
California	0	0	0	0	0
Hawaii	2,449	2,449	0	0	0
Oregon	6	0	6	0	0
Washington	11	0	11	0	0

a. Includes coke oven gas, manufactured gas, biomass gas, and air injection for Btu stabilization.
b. Manufactured gas.
c. Biomass gas.
d. Coke oven gas.
e. Less than 500,000 cubic feet.
f. Air injection for Btu stabilization.

Source: U.S. Department of Energy, Energy Information Administration, *Natural Gas Annual*, 1984.

TABLE 3-17
NUMBER OF PRODUCING GAS WELLS, BY STATE, 1965-1985[a]

Division and State	1965	1970	1975	1980	1983	1984[R]	1985[P]
United States	**111,680**	**117,483**	**132,095**	**182,004**	**221,952**	**233,853**	**238,342**
New England	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**18,666**	**16,839**	**18,200**	**21,976**	**27,423**	**29,000**	**28,324**
New Jersey	0	0	0	0	0	0	0
New York	1,150	600	900	2,076	3,423	3,500	4,324
Pennsylvania	17,516	16,239	17,300	19,900	24,000	25,500	24,000
East North Central	**7,626**	**9,082**	**11,110**	**18,442**	**26,977**	**30,031**	**36,313**
Illinois	25	8	41	70	64	81	190
Indiana	275	50	478	698	737	758	1,220
Michigan	226	1,235	209	423	414	535	755
Ohio	7,100	7,789	10,382	17,251	25,762	28,657	32,148
Wisconsin	0	0	0	0	0	0	0
West North Central	**7,281**	**8,735**	**8,925**	**12,935**	**14,214**	**15,049**	**11,916**
Iowa	0	0	0	0	0	0	0
Kansas	7,200	8,660	8,865	12,820	14,100	14,925	11,776
Minnesota	0	0	0	0	0	0	0
Missouri	11	11	3	0	0	4	0
Nebraska	39	35	19	22	23	23	0
North Dakota	31	29	18	80	51	55	98
South Dakota	0	0	20	13	40	42	42
South Atlantic	**19,719**	**20,833**	**21,901**	**26,167**	**29,982**	**31,584**	**33,081**
Delaware	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	0	0	0	0	0	0
Maryland	20	16	15	9	8	9	0
North Carolina	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0
Virginia	99	115	186	258	299	425	581
West Virginia	19,600	20,702	21,700	25,900	29,675	31,150	32,500
East South Central	**6,490**	**7,255**	**7,684**	**8,922**	**10,085**	**10,951**	**11,847**
Alabama	0	2	45	314	461	690	822
Kentucky	6,100	6,913	7,386	7,984	8,532	8,798	9,515
Mississippi	370	325	248	447	552	683	690
Tennessee	20	15	5	177	540	780	820
West South Central	**40,502**	**42,283**	**48,440**	**71,447**	**85,392**	**88,325**	**88,101**
Arkansas	744	1,008	1,128	1,114	1,763	2,371	2,550
Louisiana	8,563	9,690	11,359	16,190	16,700	17,124	14,436
Oklahoma	7,447	8,168	9,769	16,419	22,230	23,691	24,500
Texas	23,748	23,417	26,184	37,724	44,699	45,139	46,615
Mountain	**10,352**	**11,425**	**14,189**	**20,914**	**26,380**	**27,357**	**25,825**
Arizona	8	4	1	1	1	1	0
Colorado	701	861	1,380	2,997	4,391	4,549	4,529
Idaho	0	0	0	0	0	0	0
Montana	784	739	1,235	1,881	2,133	2,153	2,033
Nevada	0	0	0	0	0	0	0
New Mexico	8,010	8,848	10,352	14,571	17,547	17,806	16,447
Utah	148	173	271	200	322	700	655
Wyoming	701	800	950	1,264	1,986	2,148	2,161
Pacific	**1,044**	**1,031**	**1,646**	**1,201**	**1,499**	**1,556**	**1,400**
Alaska	11	51	61	71	78	81	81
California	1,033	980	1,585	1,125	1,413	1,469	1,319
Hawaii	0	0	0	0	0	0	0
Oregon	0	0	0	5	8	6	0
Washington	0	0	0	0	0	0	0
Other States	**0**	**0**	**0**	**0**	**0**	**0**	**52**
Federal Waters	**b**	**b**	**b**	**b**	**b**	**b**	**3,483**

a. Data pertain only to dry gas and condensate wells. Data as of December 31.
b. "Federal Waters" is included in Texas, Louisiana, and California totals.
R - Revised. P - Preliminary.
Source: Preliminary numbers taken from *World Oil*, February 15, 1986. Revised numbers taken from U.S. Department of Energy, Energy Information Administration, *Natural Gas Annual*, 1984.

TABLE 3-18
NEW GAS WELL COMPLETIONS, BY STATE, 1970-1985[a]

Division and State	1970[R]	1975[R]	1980[R]	1982[P]	1983[P]	1984[P]	1985[P]
United States	**4,031**	**8,169**	**17,132**	**18,810[b]**	**14,505[b]**	**16,960[b]**	**15,388[b]**
New England	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**255**	**964**	**1,634**	**2,207**	**1,631**	**1,863**	**963**
New Jersey	0	0	0	0	0	0	0
New York	17	362	368	593	359	376	200
Pennsylvania	238	602	1,266	1,614	1,272	1,487	763
East North Central	**750**	**835**	**2,795**	**2,921**	**2,711**	**3,429**	**2,080**
Illinois	6	5	14	20	26	37	7
Indiana	5	17	46	24	22	21	23
Michigan	18	34	52	51	41	69	32
Ohio	721	779	2,683	2,826	2,622	3,302	2,018
Wisconsin	0	0	0	0	0	0	0
West North Central	**111**	**501**	**681**	**768**	**463**	**396**	**344**
Iowa	0	0	0	0	0	0	0
Kansas	109	499	642	730	433	387	336
Minnesota	0	0	0	0	0	0	0
Missouri	0	1	2	2	1	0	1
Nebraska	2	1	3	10	15	5	1
North Dakota	0	0	14	19	7	3	3
South Dakota	0	0	20	7	7	1	3
South Atlantic	**707**	**595**	**1,545**	**1,738**	**1,281**	**1,662**	**911**
Delaware	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	1	0	0	0	1
Georgia	0	0	0	0	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0
Virginia	0	26	17	53	11	56	66
West Virginia	707	569	1,527	1,685	1,270	1,606	844
East South Central	**141**	**242**	**581**	**667**	**572**	**659**	**459**
Alabama	5	34	64	92	92	147	84
Kentucky	110	128	191	314	245	348	277
Mississippi	16	32	69	64	40	49	47
Tennessee	10	48	257	197	195	115	51
West South Central	**1,685**	**3,872**	**7,627**	**8,015**	**5,987**	**6,548**	**4,376**
Arkansas	32	24	121	172	200	218	222
Louisiana	575	830	1,787	1,405	1,039	1,158	815
Oklahoma	295	667	2,146	2,412	1,628	1,775	1,124
Texas	783	2,351	3,573	4,026	3,120	3,397	2,215
Mountain	**326**	**1,108**	**2,179**	**2,154**	**1,274**	**1,232**	**940**
Arizona	0	0	0	0	1	0	0
Colorado	54	268	546	629	438	481	268
Idaho	0	0	0	0	0	0	0
Montana	48	265	226	188	77	105	69
Nevada	0	0	1	0	0	0	0
New Mexico	169	464	1,061	995	498	428	514
Utah	10	16	97	135	104	81	44
Wyoming	45	95	248	207	156	137	45
Pacific	**56**	**52**	**90**	**107**	**87**	**105**	**79**
Alaska	2	3	2	8	1	0	0
California	54	49	86	98	86	105	79
Hawaii	0	0	0	0	0	0	0
Oregon	0	0	2	1	0	0	0
Washington	0	0	0	0	0	0	0
Federal Waters	**0**	**0**	**0**	**7**	**7**	**3**	**1**

a. See detailed explanation at the beginning of this section.
b. Reflects API estimates. State totals do not add to U.S. total. See Footnote a.
R–Revised. P–Preliminary.
Source: American Petroleum Institute, *Well Completions and Footage Drilled in the U.S.* (Data for 1970, 1975 and 1980); *Quarterly Completion Report*, Fourth Quarter 1985 (Data for 1982-1985).

TABLE 3-19
NEW FIELD WILDCAT WELLS DRILLED AND PROPORTION SUCCESSFUL 1960-1985[a]

Year	Total Drilled	Dry	Productive	Percent Productive
1960	7,320	6,575	745	10.2
1965	6,182	5,544	638	10.3
1970[R]	4,829	4,348	481	10.0
1971[R]	4,636	4,161	475	10.2
1972[R]	5,011	4,454	557	11.1
1973[R]	5,096	4,346	750	14.7
1974[R]	5,946	5,084	862	14.5
1975[R]	6,238	5,315	923	14.8
1976[R]	5,856	4,871	985	16.8
1977[R]	6,162	5,170	992	16.1
1978[R]	6,731	5,603	1,128	16.8
1979[R]	6,423	5,203	1,220	19.0
1980[R]	7,332	5,973	1,359	18.5
1981[R]	9,151	7,563	1,588	17.4
1982[R]	7,386	6,061	1,325	17.9
1983[R]	6,057	5,063	994	16.4
1984[R]	6,260	5,300	960	15.3
1985[P]	3,823	3,325	498	13.0

a. See detailed explanation at the beginning of this section. For this table all data is published on an "as reported" basis. Therefore, recent periods are incomplete and understate actual drilling levels.
R-Revised. P-Preliminary.
Source: American Petroleum Institute, *Quarterly Completion Report*, Fourth Quarter 1985.

TABLE 3-20
NEW WELL COMPLETIONS, BY TYPE OF WELL, 1960-1985[a]

Year	Total[b]	Oil	Gas	Dry	Service[c]
1960[R]	44,018	21,186	3,952	17,574	2,733
1965[R]	39,510	18,761	4,724	16,025	1,922
1970[R]	28,173	13,043	4,031	11,099	1,258
1971[R]	26,268	11,903	3,983	10,382	1,365
1972[R]	27,934	11,437	5,484	11,013	1,458
1973[R]	27,692	10,251	6,975	10,466	908
1974[R]	33,037	13,664	7,168	12,205	1,132
1975[R]	38,884	16,979	8,169	13,736	1,612
1976[R]	40,940	17,697	9,438	13,805	1,528
1977[R]	45,855	18,700	12,119	15,036	1,320
1978[R]	50,061	19,065	14,405	16,591	1,547
1979[R]	51,890	20,689	15,166	16,035	1,424
1980[R]	69,486	32,120	17,132	20,234	1,952
1981[R]	89,234	42,520	19,742	26,972	2,223
1982[R]	83,889	39,252	18,810	25,827	2,051
1983[R]	75,738	37,396	14,505	23,837	1,917
1984[R]	85,359	43,012	16,960	25,387	1,929
1985[P]	74,919	38,106	15,388	21,425	1,106

a. See detailed explanation at the beginning of this section.
b. Includes Oil, Gas and Dry, but not service.
c. Excludes stratigraphic and core tests. Based on "as reported" data. Not included in Total.
R-Revised. P-Preliminary.
Note: All data from 1982-1985 reflects API estimates except service.
Source: Oil and Gas Journal prior to 1968, American Petroleum Institute, *Quarterly Completion Report*, Fourth Quarter 1985.

TABLE 3-21
NEW WELL COMPLETIONS, BY TYPE OF WELL AND STATE, 1985[a]

Division and State	Total[b]	Oil	Gas	Dry	Service[c]
United States	**74,919[d]**	**38,106[d]**	**15,388[d]**	**21,425[d]**	**1,106**
New England	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**1,684**	**674**	**963**	**47**	**26**
New Jersey	0	0	0	0	0
New York	269	54	200	15	0
Pennsylvania	1,415	620	763	32	26
East North Central	**5,395**	**1,854**	**2,080**	**1,461**	**46**
Illinois	1,241	761	7	473	3
Indiana	827	351	23	453	27
Michigan	585	147	32	406	9
Ohio	2,742	595	2,018	129	7
Wisconsin	0	0	0	0	0
West North Central	**4,867**	**1,898**	**346**	**2,328**	**85**
Iowa	0	0	0	0	0
Kansas	4,001	1,650	336	2,015	81
Minnesota	0	0	0	0	0
Missouri	13	0	1	12	1
Nebraska	206	66	1	139	1
North Dakota	319	171	3	145	0
South Dakota	28	11	3	14	2
South Atlantic	**994**	**67**	**911**	**16**	**4**
Delaware	0	0	0	0	0
District of Columbia	0	0	0	0	0
Florida	13	6	1	6	0
Georgia	1	0	0	1	0
Maryland	0	0	0	0	0
North Carolina	0	0	0	0	0
South Carolina	0	0	0	0	0
Virginia	69	1	66	2	0
West Virginia	911	60	844	7	4
East South Central	**2,512**	**982**	**489**	**1,101**	**26**
Alabama	271	38	84	149	0
Kentucky	1,660	758	277	625	26
Mississippi	462	119	47	296	0
Tennessee	119	37	51	31	0
West South Central	**30,201**	**16,639**	**4,376**	**9,186**	**796**
Arkansas	893	357	222	314	20
Louisiana	4,714	2,147	815	1,752	62
Oklahoma	5,712	2,929	1,124	1,659	46
Texas	18,882	11,206	2,215	5,461	666
Mountain	**4,311**	**1,877**	**940**	**1,494**	**84**
Arizona	3	1	0	2	0
Colorado	1,090	420	268	402	10
Idaho	3	0	0	3	0
Montana	481	163	69	249	1
Nevada	21	1	0	20	0
New Mexico	1,435	679	514	242	21
Utah	253	134	44	75	1
Wyoming	1,025	479	45	501	21
Pacific	**2,585**	**2,273**	**79**	**233**	**71**
Alaska	15	15	0	0	1
California	2,567	2,258	79	230	70
Hawaii	0	0	0	0	0
Oregon	0	0	0	0	0
Washington	3	0	0	3	0
Federal Waters	**115**	**6**	**1**	**108**	**0**

a. See detailed explanation at the beginning of this section.
b. Excludes service wells, stratigraphic and core tests.
c. Based on "as reported" data.
d. Reflects API estimates. State totals do not add to U.S. total. See footnote a.
Source: American Petroleum Institute, *Quarterly Completion Report*, Fourth Quarter 1985.

TABLE 3-22
HOLES DRILLED AND PROPORTION SUCCESSFUL, BY TYPE OF EXPLORATION HOLE
1960-1985

	Outposts-Extensions	New-Pool Wildcats	Deeper-Pool Tests	Shallower-Pool Tests	New-Field Wildcats	Total
1960						
Drilled	2,431	1,342	495	116	7,320	11,704
Dry	1,603	1,000	309	28	6,575	9,515
Productive	828	342	186	88	745	2,189
Percent Productive	34.1	25.5	37.6	75.9	10.2	18.7
1965						
Drilled	1,131	1,707	353	93	6,182	9,466
Dry	805	1,374	242	40	5,544	8,005
Productive	326	333	111	53	638	1,461
Percent Productive	28.8	19.5	31.4	57.0	10.3	15.4
1970						
Drilled	1,228	1,043	260	93	5,069	7,693
Dry	832	808	167	39	4,576	6,422
Productive	396	235	93	54	493	1,271
Percent Productive	32.2	22.5	35.8	58.1	9.7	16.5
1975						
Drilled	1,577	1,112	288	133	6,104	9,214
Dry	905	719	181	38	5,228	7,071
Productive	672	393	107	95	876	2,143
Percent Productive	42.6	35.3	37.2	71.4	14.4	23.3
1978						
Drilled	2,024	1,549	380	219	6,505	10,677
Dry	1,180	958	247	42	5,522	7,949
Productive	844	591	133	177	983	2,728
Percent Productive	41.7	38.2	35.0	80.8	15.1	25.6
1979						
Drilled	1,853	1,486	486	246	6,374	10,445
Dry	1,003	841	304	61	5,212	7,421
Productive	850	645	182	185	1,162	3,024
Percent Productive	45.9	43.4	37.5	75.2	18.2	29.0
1980						
Drilled	1,981	1,819	789	293	7,034	11,916
Dry	1,104	952	523	69	5,694	8,342
Productive	877	867	266	224	1,340	3,574
Percent Productive	44.3	47.7	33.7	76.4	19.1	30.0
1981						
Drilled	3,028	2,340	1,299	449	8,052	15,168
Dry	1,541	1,353	907	153	6,629	10,583
Productive	1,487	987	392	296	1,423	4,585
Percent Productive	49.1	42.2	30.2	65.9	17.7	30.2
1982						
Drilled	3,328	2,870	1,782	613	7,914	16,507
Dry	1,864	1,699	1,315	233	6,512	11,623
Productive	1,464	1,171	467	380	1,402	4,884
Percent Productive	44.0	40.8	26.2	62.0	17.7	29.6
1983						
Drilled	2,498	2,281	1,979	640	6,489	13,887
Dry	1,437	1,340	1,491	288	5,351	9,907
Productive	1,061	941	488	352	1,138	3,980
Percent Productive	42.5	41.3	24.7	55.0	17.5	28.7
1984						
Drilled	3,340	2,580	2,311	758	6,088	15,077
Dry	2,077	1,618	1,869	384	5,208	11,156
Productive	1,263	962	442	374	880	3,921
Percent Productive	37.8	37.3	19.1	49.3	14.5	26.0
1985						
Drilled	2,510	2,343	2,013	602	6,364	13,832
Dry	1,473	1,356	1,627	291	5,355	10,102
Productive	1,037	987	386	311	1,009	3,730
Percent Productive	41.3	42.1	19.2	51.7	15.9	27.0

Source: Committee on Statistics of Drilling, *American Association of Petroleum Geologists Bulletin*, 1985.

TABLE 3-23
EXPLORATORY WELLS AND DRY HOLES DRILLED, BY STATE AND TYPE OF WELL, 1985[a]

Division and State	Total Drilled	Dry Holes	Producers		
			Total	Oil	Gas
United States	**12,498[b]**	**9,222[b]**	**3,276[b]**	**1,953[b]**	**1,323[b]**
New England	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**46**	**16**	**30**	**1**	**29**
New Jersey	0	0	0	0	0
New York	15	7	8	0	8
Pennsylvania	31	9	22	1	21
East North Central	**991**	**803**	**188**	**127**	**61**
Illinois	234	188	46	46	0
Indiana	361	295	66	55	11
Michigan	327	289	38	21	17
Ohio	69	31	38	5	33
Wisconsin	0	0	0	0	0
West North Central	**1,560**	**1,156**	**404**	**350**	**54**
Iowa	0	0	0	0	0
Kansas	1,288	949	339	289	50
Minnesota	0	0	0	0	0
Missouri	12	11	1	0	1
Nebraska	117	99	18	18	0
North Dakota	132	88	44	42	2
South Dakota	11	9	2	1	1
South Atlantic	**22**	**8**	**14**	**2**	**12**
Delaware	0	0	0	0	0
District of Columbia	0	0	0	0	0
Florida	5	5	0	0	0
Georgia	1	1	0	0	0
Maryland	0	0	0	0	0
North Carolina	0	0	0	0	0
South Carolina	0	0	0	0	0
Virginia	2	1	1	1	0
West Virginia	14	1	13	1	12
East South Central	**819**	**602**	**217**	**97**	**120**
Alabama	116	89	27	8	19
Kentucky	423	306	117	55	62
Mississippi	217	180	37	24	13
Tennessee	63	27	36	10	26
West South Central	**4,347**	**3,265**	**1,082**	**559**	**523**
Arkansas	107	96	11	5	6
Louisiana	591	539	52	24	28
Oklahoma	320	246	74	44	30
Texas	3,329	2,384	945	486	459
Mountain	**1,285**	**959**	**326**	**236**	**90**
Arizona	2	1	1	1	0
Colorado	398	288	110	75	35
Idaho	3	3	0	0	0
Montana	180	157	23	20	3
Nevada	19	19	0	0	0
New Mexico	237	114	123	77	46
Utah	39	34	5	4	1
Wyoming	407	343	64	59	5
Pacific	**120**	**105**	**15**	**8**	**7**
Alaska	0	0	0	0	0
California	119	104	15	8	7
Hawaii	0	0	0	0	0
Oregon	0	0	0	0	0
Washington	1	1	0	0	0
Federal Waters	**91**	**91**	**0**	**0**	**0**

a. See detailed explanation at the beginning of this section.
b. Reflects API estimates. State totals do not add to U.S. total. See footnote a.
Source: American Petroleum Institute, *Quarterly Completion Report*, Fourth Quarter 1985.

TABLE 3-24
DRILLING OPERATIONS AND EXPENDITURES, BY TYPE OF WELL, 1983-1984[a]

	Total	Oil	Gas[b]	Dry
		1983		
Wells drilled	67,536	33,485	12,919	21,132
Footage drilled (000)	301,226	130,824	72,487	97,915
Expenditures (000)	$25,104,542	$9,503,761	$7,855,762	$7,745,019
Average depth per well (ft)	4,460	3,907	5,611	4,633
Average cost per well	$ 371,721	$ 283,821	$ 608,078	$ 366,507
Average cost per foot	$ 83.34	$ 72.65	$ 108.37	$ 79.10
		1984		
Wells drilled	77,210	38,976	14,983	23,251
Footage drilled (000)	350,559	154,018	82,644	113,927
Expenditures (000)	$25,206,219	$10,214,240	$7,338,788	$7,653,191
Average depth per well (ft)	4,541	3,952	5,516	4,900
Average cost per well	$ 326,463	$ 262,065	$ 489,808	$ 329,155
Average cost per foot	$ 71.90	$ 66.32	$ 88.80	$ 67.18

a. Includes all charges for drilling and equipping wells up to and including the "Christmas" trees, but excludes exploration, development and production costs and expenditures for service wells.
b. Includes condensate wells.
Source: American Petroleum Institute, *Joint Association Survey on Drilling Costs*, December 1985.

TABLE 3-25
OFFSHORE DRILLING OPERATIONS AND EXPENDITURES, BY TYPE OF WELL, 1983-1984[a]

	Total	Oil	Gas[b]	Dry
		1983[R]		
Wells drilled	1,270	459	293	518
Footage drilled (000)	12,831	4,312	3,124	5,395
Expenditures (000)	$4,960,724	$1,499,152	$1,213,033	$2,248,539
Average depth per well (ft)	10,104	9,395	10,664	10,415
Average cost per well	$3,906,082	$3,266,127	$4,140,044	$4,340,809
Average cost per foot	$ 386.62	$ 347.67	$ 388.29	$ 416.78
		1984		
Wells drilled	1,421	486	372	563
Footage drilled (000)	14,259	4,382	3,789	6,090
Expenditures (000)	$5,023,947	$1,322,458	$1,352,636	$2,348,852
Average depth per well (ft)	10,035	9,016	10,182	10,817
Average cost per well	$3,535,501	$2,721,107	$3,636,119	$4,172,019
Average cost per foot	$ 352.33	$ 301.79	$ 357.08	$ 385.69

a. Includes all charges for drilling and equipping wells up to and including the "Christmas" trees, but excludes exploration, development and production costs and expenditures for service wells.
b. Includes condensate wells.
R–Revised.
Source: American Petroleum Institute, *Joint Association Survey on Drilling Costs*, December 1985.

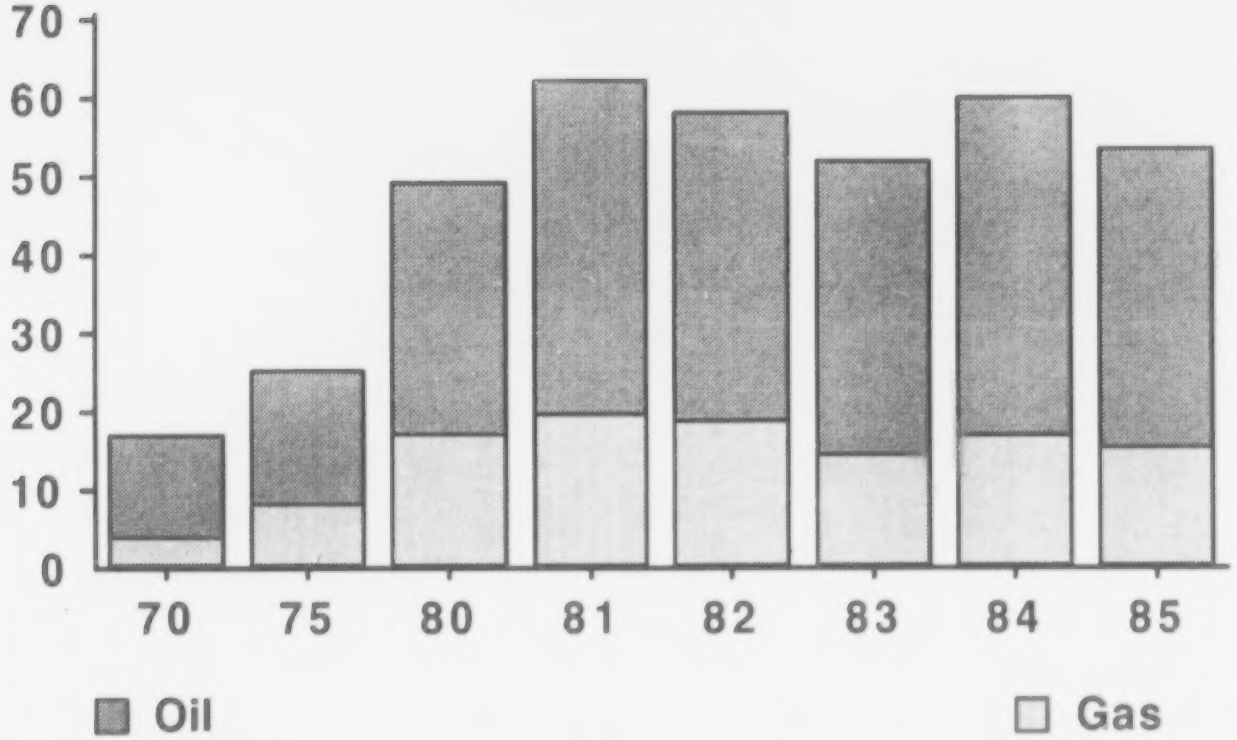
TABLE 3-16
NATURAL GAS TREATED FOR NATURAL GASOLINE AND ALLIED PRODUCTS, AND QUANTITIES AND VALUE OF PRODUCTS RECOVERED, 1960-1985[a]

Year	Natural Gas Treated	Products Recovered							
		Natural Gasoline		Liquefied Petroleum Gases		Finished Gasoline and Naphtha		Other Products[b]	
	(Millions of cubic feet)	Quantity (Thousands of gallons)	Value (Thousands of dollars)	Quantity (Thousands of gallons)	Value (Thousands of dollars)	Quantity (Thousands of gallons)	Value (Thousands of dollars)	Quantity (Thousands of gallons)	Value (Thousands of dollars)
1960	9,768,189	4,479,454	313,058	8,444,074	391,566	503,659	43,400	859,394	60,361
1961	10,261,669	4,666,319	311,966	9,085,465	370,186	473,496	31,996	965,648	68,057
1962	11,089,241	4,772,260	333,965	9,409,083	353,334	450,991	37,347	1,021,271	73,505
1963	12,430,353	4,899,323	320,131	10,302,250	359,770	499,901	40,922	1,135,743	78,120
1964	13,176,126	5,286,703	341,714	10,743,591	362,792	506,505	37,815	1,206,973	84,071
1965	13,772,101	5,457,367	360,603	11,257,267	417,249	439,267	36,270	1,391,436	97,481
1966	14,924,429	5,564,139	366,332	12,134,294	527,223	380,135	33,380	1,604,154	120,426
1967	15,641,633	5,850,271	389,156	13,717,861	632,994	307,263	28,044	1,731,727	129,742
1968	16,316,674	6,210,708	411,695	14,753,004	552,335	280,728	26,577	1,868,622	133,407
1969	17,655,108	6,633,018	457,986	15,895,194	498,927	374,514	36,954	1,467,396	108,144
1970	18,509,309	6,935,838	468,602	16,783,662	672,088	240,702	23,234	1,488,270	111,188
1971	19,252,807	6,942,474	496,676	17,540,628	769,397	224,784	23,210	1,240,344	96,771
1972	19,906,893	6,875,442	500,425	18,678,912	828,718	186,732	20,737	1,063,986	83,261
1973	19,679,291	6,791,736	568,214	18,775,386	1,188,289	136,038	13,902	942,606	86,668
1974	18,684,480	6,212,766	974,825	18,813,732	1,980,769	52,878	10,028	797,664	122,305
1975	17,748,426	5,620,608	777,637	18,651,612	1,893,890	45,528	8,411	712,488	92,650
1976	17,717,951	5,575,584	882,718	18,369,372	2,298,647	40,572	9,650	670,362	93,074
1977	17,569,835	5,587,134	c	18,604,152	c	30,156	c	577,668	c
1978	c	5,306,784	c	18,124,512	c	28,896	c	567,420	c
1979	c	4,042,668	c	26,008,878	c	271,908	c	917,952	c
1980	c	4,560,696	c	18,518,304	c	239,694	c	864,360	c
1981	c	4,471,740	c	19,259,772	c	154,014	c	773,472	c
1982	c	3,850,308	c	19,277,622	c	93,030	c	545,916	c
1983	c	3,015,684	c	20,142,276	c	128,772	c	608,160	c
1984	c	4,490,136	c	20,506,248	c	2,898	c	52,752	c
1985	c	4,321,212	c	20,131,440	c	89,124	c	127,260	c

a. Due to changes in reporting requirements, 1979-1985 data is not comparable with prior years.
b. Includes kerosene, distillate fuel oil, and miscellaneous products.
c. Not available.
Source: U.S. Department of Energy, Energy Information Administration, *Petroleum Supply Annual*, 1985.

CHART 3-2

TOTAL GAS AND OIL NEW WELL COMPLETIONS (THOUSANDS)



REFERENCE: TABLE 3-20

TABLE 3-26
AVERAGE COST PER FOOT BY TYPE OF WELL, BY DEPTH CLASSES, 1980-1984[a]

Depth Range (in feet)	Total	Oil	Gas	Dry
		1980		
0- 1,249	$ 35.62	$ 37.13	$ 35.61	$ 30.89
1,250- 2,499	36.06	40.11	35.04	28.73
2,500- 3,749	36.82	41.31	41.00	26.37
3,750- 4,999	38.40	44.65	41.09	28.39
5,000- 7,499	51.18	56.22	56.73	40.23
7,500- 9,999	77.09	76.70	89.68	65.71
10,000-12,499	121.97	126.20	129.45	110.52
12,500-14,999	170.50	167.77	179.17	163.04
15,000-17,499	237.23	258.21	233.38	236.34
17,500-19,999	285.63	406.31	300.57	258.49
20,000 and over	396.84	b	396.20	397.63
		1981		
0- 1,249	$ 46.17	$ 46.76	$ 51.62	$ 42.10
1,250- 2,499	42.00	47.92	39.97	31.46
2,500- 3,749	43.09	49.21	46.77	30.82
3,750- 4,999	46.24	54.92	48.09	34.41
5,000- 7,499	63.16	70.74	68.86	49.94
7,500- 9,999	95.86	94.92	109.58	86.32
10,000-12,499	148.80	145.50	163.37	138.05
12,500-14,999	207.53	199.99	228.61	192.20
15,000-17,499	286.38	270.92	314.25	260.55
17,500-19,999	412.30	348.08	433.37	393.12
20,000 and over	509.90	508.40	443.82	575.99
		1982		
0- 1,249	$ 39.50	$ 42.35	$ 47.77	$ 29.75
1,250- 2,499	39.50	46.24	41.96	26.96
2,500- 3,749	42.60	49.18	47.33	28.64
3,750- 4,999	46.77	55.08	50.16	32.77
5,000- 7,499	65.76	74.39	71.19	50.52
7,500- 9,999	101.32	98.63	120.51	89.70
10,000-12,499	160.97	165.42	174.95	143.37
12,500-14,999	239.97	238.27	260.12	219.04
15,000-17,499	337.08	332.07	354.38	318.49
17,500-19,999	462.98	477.76	503.54	409.53
20,000 and over	607.72	423.23	586.21	638.86
		1983		
0- 1,249	$ 37.13	$ 39.35	$ 44.63	$ 29.96
1,250- 2,499	38.07	44.71	40.89	24.60
2,500- 3,749	38.08	43.61	43.20	25.19
3,750- 4,999	41.01	50.52	40.01	28.54
5,000- 7,499	53.44	61.93	53.38	43.02
7,500- 9,999	81.37	82.91	86.27	74.99
10,000-12,499	127.31	131.51	146.48	104.95
12,500-14,999	211.85	216.01	220.35	202.20
15,000-17,499	295.25	340.40	302.32	275.03
17,500-19,999	412.40	365.65	413.40	416.48
20,000 and over	645.79	578.32	659.82	639.18
		1984		
0- 1,249	$ 37.61	$ 41.49	$ 39.43	$ 24.90
1,250- 2,499	37.79	43.91	39.46	24.04
2,500- 3,749	38.73	45.75	40.28	24.70
3,750- 4,999	38.96	46.96	40.86	27.38
5,000- 7,499	50.91	60.26	51.17	37.97
7,500- 9,999	72.53	72.38	89.14	61.23
10,000-12,499	110.00	110.48	128.02	95.02
12,500-14,999	172.41	175.18	189.63	158.07
15,000-17,499	258.70	234.18	279.90	250.02
17,500-19,999	338.58	299.16	326.98	352.65
20,000 and over	574.81	447.54	545.20	625.53

a. Includes all charges for drilling and equipping wells up to and including the "Christmas" trees but excludes exploration, development and production costs and expenditures for service wells.
b. No data reported
Source: American Petroleum Institute, *Joint Association Survey on Drilling Costs*, December 1985.

TABLE 3-28
WORLD WELL COMPLETIONS
1983

Area	Oil	Gas	Dry	Service	Suspended	Total Wells	Total Footage
North America	35,996	12,415	19,958	1,574	4,577	74,520	329,698,538
South America	2,712	90	594	187	649	4,232	21,125,880
Far East	2,994	225	303	1,005	204	5,709[b]	35,339,436
Western Europe	308	194	300	52	69	923	7,561,222
Middle East	402	53	107	133	52	829[c]	6,013,465
Africa	382	24	150	51	22	849[d]	6,967,296
Oceania	84	46	153	0	4	288	2,044,670
World Total[a]	42,878	13,047	21,565	3,002	5,577	87,350	408,750,507

a. No drilling data available for Eastern Europe, USSR, Iran and Iraq.
b. Total does not add due to inclusion of 978 total wells from China.
c. Total does not add due to inclusion of 82 total wells from Syria.
d. Total does not add to inclusion of 140 total wells from Algeria and 80 total wells from Libya.
Source: *World Oil*, August 15, 1984.

WORLD WELL COMPLETIONS
1984

Area	Oil	Gas	Dry	Service	Suspended	Total Wells	Total Footage
North America	41,317	13,074	22,741	3,461	1,621	82,214	398,641,219
South America	2,483	90	605	231	189	3,598	19,046,226
Far East	3,772	207	273	1,308	190	6,912[b]	41,172,157
Western Europe	302	185	444	72	79	1,082	9,096,193
Middle East	345	33	89	85	17	704[c]	5,403,163
Africa	317	27	158	13	90	671[d]	5,038,719
Oceania	147	79	167	1	0	394	2,782,519
World Total[a]	48,683	13,695	24,477	5,171	2,186	95,575	481,180,196

a. No drilling data available for Eastern Europe, USSR, Iran and Iraq.
b. Total does not add due to inclusion of 1,162 total wells from China.
c. Total does not add due to inclusion of 40 total wells from Iran and 95 total wells from Syria.
d. Total does not add due to inclusion of 66 total wells from Algeria.
Source: *World Oil*, August 15, 1985.

WORLD WELL COMPLETIONS
1985

Area	Oil	Gas	Dry	Service	Suspended	Total Wells	Total Footage
North America	40,108	13,917	21,835	1,682	44	77,907	346,072,879
South America	2,404	140	479	283	106	3,412	19,803,342
Far East	4,361	206	290	1,267	139	7,553[b]	49,843,900
Western Europe	415	283	295	50	119	1,162	9,440,667
Middle East	427	10	68	76	32	868[c]	5,817,560
Africa	326	41	212	30	49	658	5,458,452
Oceania	142	51	188	3	5	389	2,445,823
World Total[a]	48,183	14,648	23,367	3,391	494	91,659	438,882,623

a. No drilling data available for Eastern Europe, USSR, Iran and Iraq.
b. Total does not add due to inclusion of 1,300 total wells from China.
c. Total does not add due to inclusion of 50 total wells from Iran, 138 total wells from Syria, and 60 total wells from Iraq.
Source: *World Oil*, August, 1986.

SECTION 4
UNDERGROUND GAS STORAGE

	1985	% Change 85/84
Number of Pools	400	− 2.9
Est. Ultimate Capacity (Millions of cubic feet)	7,731,902	− 0.7
Input to Storage (Millions of cubic feet)	2,067,627	− 3.7
Output from Storage (Millions of cubic feet)	2,266,219	+ 19.2
Maximum Day Output (Millions of cubic feet)	42,919	+ 14.7

TABLE 4-1
NUMBER OF UNDERGROUND STORAGE POOLS AND ULTIMATE CAPACITY IN THE UNITED STATES, 1960-1985

Year	Number of Pools	Number of States	Est. Ultimate Capacity (Billions of Cubic Feet)
1960	217	20	2,854
1965	293	24	4,086
1966[R]	303	24	4,421
1967	308	25	4,520
1968	315	26	4,783
1969	320	26	4,927
1970	325	26	5,178
1971	333	26	5,575
1972	348	26	6,040
1973	360	26	6,279
1974	367	26	6,360
1975	376	26	6,644
1976	386	26	6,927
1977	385	26	7,223
1978	388	26	7,330
1979	399	26	7,437
1980	401	26	7,488
1981	393	26	7,581
1982[R]	404	26	7,727
1983	419	26	7,755
1984	412	26	7,783
1985	400	26	7,731

R - Revised.
Source: A.G.A. *The Underground Storage of Gas in the United States and Canada* — 1985 Update.

TABLE 4-2
NUMBER OF AQUIFER POOLS AND ULTIMATE CAPACITY IN THE UNITED STATES, 1960–1985[a]

Year	Number of Pools	Number of States	Est. Ultimate Capacity (Billions of Cubic Feet)
1960	14	8	b
1965	37	9	643
1970	43	9	968
1971	44	8	1,056
1972	46	9	1,278
1973	49	10	1,399
1974	51	10	1,408
1975	52	10	1,459
1976	52	10	1,484
1977	52	10	1,578
1978	53	10	1,593
1979[R]	56	10	1,601
1980	57	10	1,449
1981[R]	57	10	1,423
1982	56	10	1,432
1983	56	10	1,421
1984	54	10	1,472
1985	52	10	1,401

a. These data are included in Table 4-1.
b. Not available.
R–Revised.
Source: Same as Table 4-1.

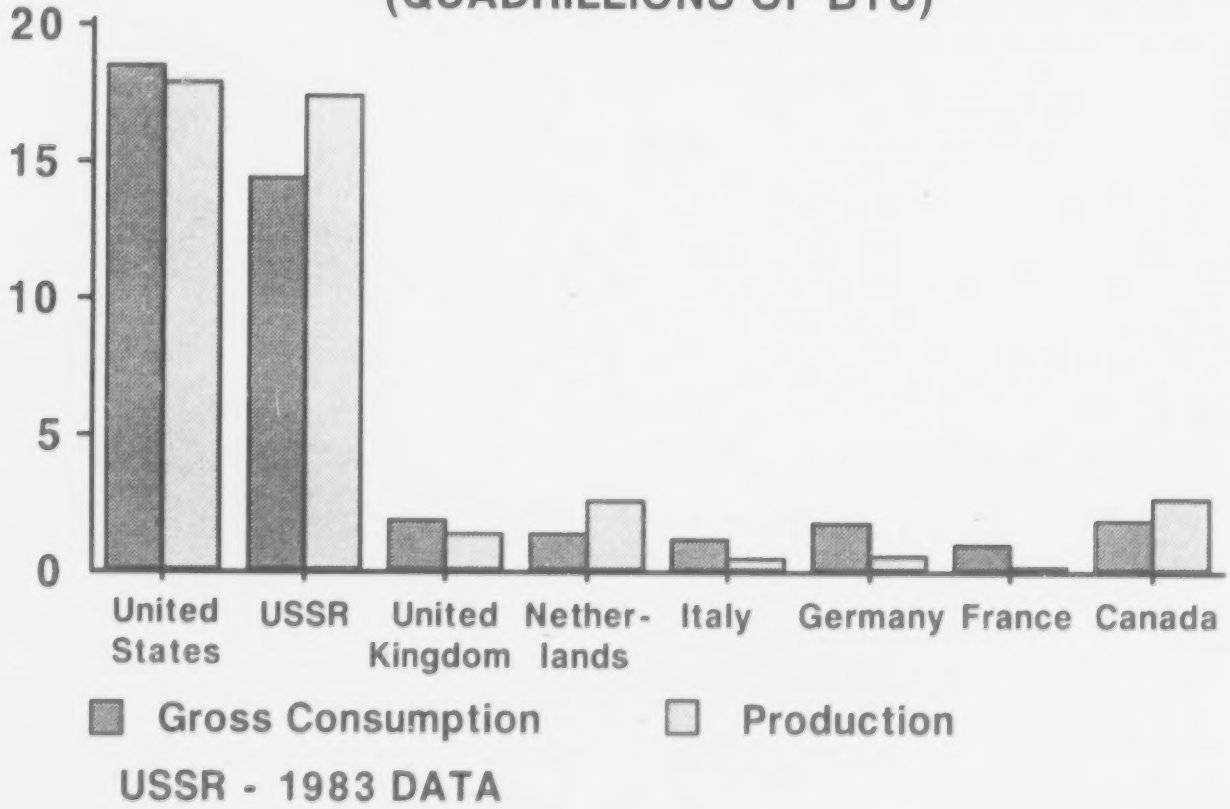
TABLE 4-3
LIQUEFIED NATURAL GAS STORAGE OPERATIONS IN THE UNITED STATES AS OF DECEMBER 31, 1985[a]

	Presently Operating	Proposed or Pending Operation
Complete Plants		
Storage Capacity—MMcf	61,903	2,069
Gross Liquefaction Capacity—MMcf/day	315	10
Sendout Capacity—MMcf/day	8,203	740
Number of Facilities	65	4
Satellite Plants		
Storage Capacity—MMcf	7,179	0
Sendout Capacity—MMcf/day	958	0
Number of Facilities	43	0
Import Terminals[b]		
Storage Capacity—MMcf	5,250	5,775
Sendout Capacity—MMcf/day	585	1,600
Number of Facilities	2	1

a. Not underground storage.
b. Of those presently operating, Algonquin terminal has been utilized for domestic storage since 1973.
Source: Institute of Gas Technology.

CHART 3-3

NATURAL GAS PRODUCTION AND GROSS CONSUMPTION, 1984
(QUADRILLIONS OF BTU)



REFERENCE: TABLE 3-27

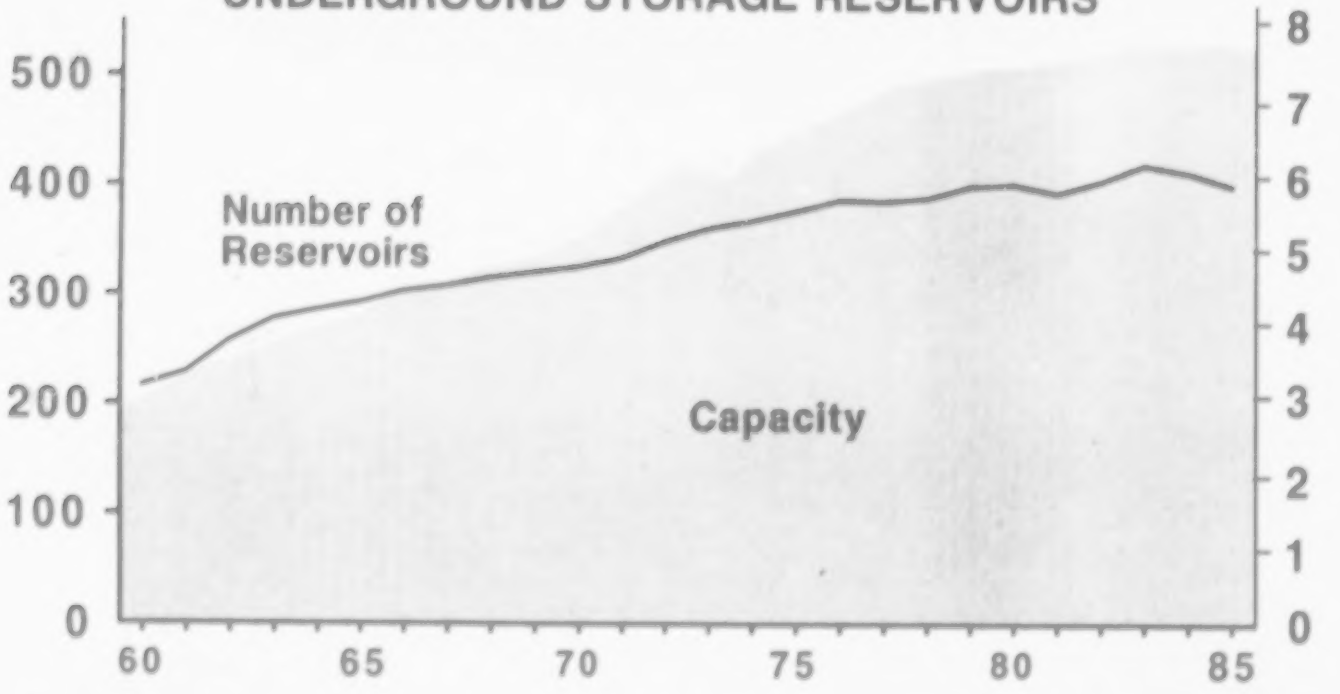
TABLE 3-27
SELECT WORLD NATURAL GAS STATISTICS
1984

Country	Production	Imports	Exports	Gross Consumption	Residential Consumers (000)	Miles of Pipeline (000)
	(Trillions of Btu)					
Austria	48.5	155.4	—	188.8	949	6.6
Belgium	1.4	334.5	10.4	324.0	3,600	20.5
Canada	2,724.9	.1	770.4	1,942.7	2,303	95.1
Czechoslovakia	22.8	261.0[b]	3[b]	307.1	2,370	18.9
Denmark	9.0	1.5	5.4	4.4	357	2.7
Finland	—	28.2	—	28.2	94	.3
France	233.9	808.2	6.0	1,033.5	8,026	76.5
German Democratic Republic	146.7	198.5	6.7	342.0	3,571	26.0
Federal Republic of Germany	585.0	1,254.7	43.7	1,797.6	8,172[b]	100.7[a]
Greece	3.4	—	—	3.4	6	.3
Hungary	241.4	123.7	.3	368.7	3,532	5.8
Ireland	83.2	—	—	83.2	166	2.2
Italy	494.3	693.4	—	1,169.1	8,100[b]	54.8[a]
Luxembourg	—	12.3	—	12.3	57	.6
Netherlands	2,575.8	114.0	1,330.9	1,359.2	4,550[c]	57.2[c]
Norway	1,043.6	—	996.4	47.2	2[a]	1[a]
Poland	158.5	203.1	—	361.6	6,872	17.6
Spain	6.5	82.2	—	89.9	1,449	5.8
Switzerland	—	55.1	1.7	53.4	498	6.2
USSR	17,429.8[a]	—	—	14,377.1[d]	62,032	209.6
United Kingdom	1,415.0	500.4	—	1,915.4	16,020	144.2[a]
United States	17,889.4	887.7	56.7	18,502.8	45,153[a]	1,003.8
Yugoslavia	62.6	124.6	—	187.2	425	4.5

a. 1983 data.
b. 1982 data.
c. 1981 data.
d. 1980 data.
Source: United Nations, *Annual Bulletin of Gas Statistics for Europe*, 1984.

CHART 4-1

NUMBER AND CAPACITY OF EXISTING UNDERGROUND STORAGE RESERVOIRS



REFERENCE: TABLE 4-1

TABLE 4-4
INPUTS, OUTPUTS, AND GAS IN UNDERGROUND STORAGE, BY STATE, 1985

(Millions of Cubic Feet)

Division and State	Year Ending December 31, 1985					
	Input to Storage	Output from Storage	Native Gas	Stored Gas	Maximum Stored Gas	Maximum Day Output
United States	**2,067,627**	**2,266,219**	**1,124,721**	**5,129,314**	**5,793,521**	**42,919**
New England	**0**	**0**	**0**	**0**	**0**	**0**
Middle Atlantic	**370,225**	**420,090**	**43,583**	**708,919**	**817,208**	**6,244**
New Jersey	0	0	0	0	0	0
New York	48,073	53,938	15,096	131,794	146,100	849
Pennsylvania	322,152	366,152	28,487	577,125	671,108	5,395
East North Central	**675,620**	**741,258**	**354,442**	**1,761,514**	**2,000,174**	**14,558**
Illinois	181,250	199,587	11,384	800,192	851,836	4,314
Indiana	20,291	22,258	19,296	85,335	90,404	485
Michigan	333,119	346,742	238,816	502,561	613,720	6,876
Ohio	140,960	172,671	84,946	373,426	444,214	2,883
Wisconsin	0	0	0	0	0	0
West North Central	**140,799**	**151,499**	**52,340**	**486,570**	**527,266**	**2,630**
Iowa	64,910	63,019	0	240,167	263,448	886
Kansas	63,196	76,305	30,028	154,709	169,686	1,191
Minnesota	1,439	1,849	0	6,207	6,705	52
Missouri	4,407	4,407	0	29,286	29,299	360
Nebraska	6,847	5,919	22,312	56,201	58,128	141
North Dakota	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0
South Atlantic	**158,715**	**188,346**	**65,718**	**433,379**	**483,752**	**3,239**
Delaware	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0
Florida	0	0	0	0	0	0
Georgia	0	0	0	0	0	0
Maryland	16,019	18,453	32,457	26,258	29,527	301
North Carolina	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0
Virginia	0	0	0	0	0	0
West Virginia	142,696	169,893	33,261	407,121	454,225	2,938
East South Central	**103,078**	**107,247**	**106,741**	**174,972**	**205,701**	**2,799**
Alabama	0	0	0	0	0	0
Kentucky	60,895	52,524	79,418	110,265	127,120	1,263
Mississippi	42,183	54,723	27,323	64,707	78,581	1,536
Tennessee	0	0	0	0	0	0
West South Central	**407,958**	**436,741**	**190,083**	**931,519**	**1,062,229**	**7,702**
Arkansas	3,515	2,581	22,000	10,863	11,216	95
Louisiana	200,988	201,609	72,011	369,345	422,871	3,468
Oklahoma	89,237	106,345	22,980	287,627	326,620	2,052
Texas	114,218	126,206	73,092	263,684	301,522	2,087
Mountain	**86,648**	**83,724**	**160,120**	**367,045**	**391,318**	**1,418**
Arizona	0	0	0	0	0	0
Colorado	28,319	30,590	20,260	50,949	59,799	690
Idaho	0	0	0	0	0	0
Montana	36,421	27,361	103,414	211,130	219,027	253
Nevada	0	0	0	0	0	0
New Mexico	14,015	13,784	10,600	31,622	33,651	285
Utah	1,349	1,170	0	5,165	5,165	63
Wyoming	6,544	10,819	25,846	68,179	73,676	127
Pacific	**124,584**	**137,314**	**151,694**	**265,396**	**305,873**	**4,329**
Alaska	0	0	0	0	0	0
California	123,984	137,306	151,694	234,438	273,474	4,065
Hawaii	0	0	0	0	0	0
Oregon	0	0	0	0	0	0
Washington	600	8	0	30,958	32,399	264

Source: Same as Table 4-1.

TABLE 4-5
NUMBER OF POOLS, WELLS, COMPRESSOR STATIONS, AND HORSEPOWER IN UNDERGROUND STORAGE FIELDS, BY STATE, 1983-1985

Division and State	Number of Pools			Number of Active Wells		
	1983	1984	1985	1983	1984	1985
(1) **United States**	**419**	**412**	**400**	**18,318**	**18,367**	**18,330**
(2) **New England**	**0**	**0**	**0**	**0**	**0**	**0**
(3) **Middle Atlantic**	**92**	**92**	**86**	**2,987**	**2,981**	**3,190**
(4) New Jersey	0	0	0	0	0	0
(5) New York	22	22	22	837	838	1,003
(6) Pennsylvania	70	70	64	2,150	2,143	2,187
(7) **East North Central**	**143**	**141**	**139**	**8,977**	**8,987**	**8,945**
(8) Illinois	35	34	34	1,744	1,765	1,734
(9) Indiana	31	30	28	967	954	934
(10) Michigan	54	54	54	2,980	2,978	2,982
(11) Ohio	23	23	23	3,286	3,290	3,295
(12) Wisconsin	0	0	0	0	0	0
(13) **West North Central**	**31**	**29**	**29**	**1,414**	**1,420**	**1,420**
(14) Iowa	9	8	8	426	434	434
(15) Kansas	18	17	17	791	789	789
(16) Minnesota	1	1	1	61	61	61
(17) Missouri	1	1	1	82	82	82
(18) Nebraska	2	2	2	54	54	54
(19) North Dakota	0	0	0	0	0	0
(20) South Dakota	0	0	0	0	0	0
(21) **South Atlantic**	**38**	**38**	**38**	**1,647**	**1,669**	**1,665**
(22) Delaware	0	0	0	0	0	0
(23) District of Columbia	0	0	0	0	0	0
(24) Florida	0	0	0	0	0	0
(25) Georgia	0	0	0	0	0	0
(26) Maryland	1	1	1	82	82	82
(27) North Carolina	0	0	0	0	0	0
(28) South Carolina	0	0	0	0	0	0
(29) Virginia	0	0	0	0	0	0
(30) West Virginia	37	37	37	1,565	1,587	1,583
(31) **East South Central**	**28**	**28**	**25**	**1,306**	**1,303**	**1,100**
(32) Alabama	0	0	0	0	0	0
(33) Kentucky	24	24	21	1,205	1,202	999
(34) Mississippi	4	4	4	101	101	101
(35) Tennessee	0	0	0	0	0	0
(36) **West South Central**	**49**	**46**	**45**	**1,012**	**987**	**967**
(37) Arkansas	5	4	4	23	12	12
(38) Louisiana	8	8	8	346	347	349
(39) Oklahoma	14	14	13	300	295	301
(40) Texas	22	20	20	343	333	305
(41) **Mountain**	**27**	**27**	**27**	**474**	**513**	**533**
(42) Arizona	0	0	0	0	0	0
(43) Colorado	9	9	9	174	198	200
(44) Idaho	0	0	0	0	0	0
(45) Montana	5	5	5	206	217	235
(46) Nevada	0	0	0	0	0	0
(47) New Mexico	3	3	3	44	45	45
(48) Utah	2	2	2	17	19	19
(49) Wyoming	8	8	8	33	34	34
(50) **Pacific**	**11**	**11**	**11**	**501**	**507**	**510**
(51) Alaska	0	0	0	0	0	0
(52) California	9	9	9	424	430	433
(53) Hawaii	0	0	0	0	0	0
(54) Oregon	0	0	0	0	0	0
(55) Washington	2	2	2	77	77	77

Source: Same as Table 4-1.

TABLE 4-5 (Continued)
NUMBER OF POOLS, WELLS, COMPRESSOR STATIONS, AND HORSEPOWER IN UNDERGROUND STORAGE FIELDS, BY STATE, 1983-1985

Number of Compressor Stations			Total HP Installed in Compressor Stations			
1983	1984	1985	1983	1984	1985	
292	**292**	**281**	**1,707,697**	**1,715,276**	**1,682,492**	(1)
0	**0**	**0**	**0**	**0**	**0**	(2)
52	**52**	**47**	**251,830**	**252,730**	**225,755**	(3)
0	0	0	0	0	0	(4)
14	14	13	38,550	38,580	36,035	(5)
38	38	34	213,280	214,150	189,720	(6)
92	95	92	669,751	670,865	671,660	(7)
27	29	28	216,520	217,380	213,290	(8)
17	18	16	19,476	19,780	19,345	(9)
29	29	29	330,470	331,170	331,170	(10)
19	19	19	103,285	102,535	107,855	(11)
0	0	0	0	0	0	(12)
20	**20**	**23**	**94,295**	**93,275**	**94,050**	(13)
4	4	4	37,860	37,040	37,040	(14)
12	12	15	34,435	34,435	35,210	(15)
1	1	1	2,400	2,400	2,400	(16)
1	1	1	8,850	8,850	8,850	(17)
2	2	2	10,750	10,550	10,550	(18)
0	0	0	0	0	0	(19)
0	0	0	0	0	0	(20)
20	**20**	**20**	**89,610**	**89,610**	**89,610**	(21)
0	0	0	0	0	0	(22)
0	0	0	0	0	0	(23)
0	0	0	0	0	0	(24)
0	0	0	0	0	0	(25)
1	1	1	11,000	11,000	11,000	(26)
0	0	0	0	0	0	(27)
0	0	0	0	0	0	(28)
0	0	0	0	0	0	(29)
19	19	19	78,610	78,610	78,610	(30)
21	**21**	**17**	**74,200**	**71,950**	**71,250**	(31)
0	0	0	0	0	0	(32)
18	18	14	38,700	38,700	35,750	(33)
3	3	3	35,500	33,250	35,500	(34)
0	0	0	0	0	0	(35)
49	**45**	**43**	**320,702**	**322,692**	**318,483**	(36)
5	3	3	1,870	1,800	1,800	(37)
8	8	7	137,040	137,040	137,040	(38)
11	12	11	80,569	84,389	79,210	(39)
25	22	22	101,223	99,463	100,433	(40)
27	**28**	**28**	**80,079**	**86,924**	**83,754**	(41)
0	0	0	0	0	0	(42)
7	8	8	30,800	37,670	34,500	(43)
0	0	0	0	0	0	(44)
6	6	6	24,235	24,235	24,235	(45)
0	0	0	0	0	0	(46)
5	5	5	12,705	12,680	12,680	(47)
2	2	2	1,200	1,200	1,200	(48)
7	7	7	11,139	11,139	11,139	(49)
11	**11**	**11**	**127,230**	**127,230**	**127,930**	(50)
0	0	0	0	0	0	(51)
10	10	10	115,430	115,430	115,430	(52)
0	0	0	0	0	0	(53)
0	0	0	0	0	0	(54)
1	1	1	11,800	11,800	12,500	(55)

TABLE 4-6
ULTIMATE CAPACITY OF EXISTING RESERVOIRS, BY STATE, 1985

(Millions of Cubic Feet)

Division and State	Cushion Gas			Working Gas	Ultimate Reservoir Capacity[a]
	Native	Injected	Total		
United States	**1,124,721**	**2,455,209**	**3,579,929**	**2,686,785**	**7,731,902**
New England	**0**	**0**	**0**	**0**	**0**
Connecticut	0	0	0	0	0
Maine	0	0	0	0	0
Massachusetts	0	0	0	0	0
New Hampshire	0	0	0	0	0
Rhode Island	0	0	0	0	0
Vermont	0	0	0	0	0
Middle Atlantic	**43,583**	**387,539**	**431,123**	**321,380**	**917,410**
New Jersey	0	0	0	0	0
New York	15,096	78,006	93,102	53,788	182,136
Pennsylvania	28,487	309,533	338,021	267,592	735,274
East North Central	**354,443**	**1,019,516**	**1,373,958**	**753,272**	**2,630,865**
Illinois	11,384	552,894	564,278	247,437	899,450
Indiana	19,296	57,432	76,727	27,903	167,515
Michigan	238,816	161,388	400,204	352,308	986,984
Ohio	84,947	247,802	332,749	125,624	576,916
Wisconsin	0	0	0	0	0
West North Central	**52,341**	**233,495**	**285,836**	**253,752**	**729,664**
Iowa	0	117,751	117,751	122,415	354,500
Kansas	30,029	96,470	126,499	58,239	221,726
Minnesota	0	4,605	4,605	1,601	20,000
Missouri	0	11,759	11,759	17,527	45,000
Nebraska	22,312	2,910	25,222	53,970	88,438
North Dakota	0	0	0	0	0
South Dakota	0	0	0	0	0
South Atlantic	**65,717**	**251,742**	**317,459**	**181,638**	**574,825**
Delaware	0	0	0	0	0
District of Columbia	0	0	0	0	0
Florida	0	0	0	0	0
Georgia	0	0	0	0	0
Maryland	32,456	11,946	44,402	14,312	64,770
North Carolina	0	0	0	0	0
South Carolina	0	0	0	0	0
Virginia	0	0	0	0	0
West Virginia	33,261	239,796	273,057	167,326	510,055
East South Central	**106,741**	**44,215**	**150,955**	**131,413**	**314,980**
Alabama	0	0	0	0	0
Kentucky	79,418	25,448	104,865	85,473	206,663
Mississippi	27,323	18,767	46,090	45,940	108,317
Tennessee	0	0	0	0	0
West South Central	**190,083**	**348,334**	**538,417**	**583,184**	**1,408,054**
Arkansas	22,000	0	22,000	10,863	38,000
Louisiana	72,011	190,835	262,846	178,509	560,817
Oklahoma	25,980	128,387	151,367	159,240	400,357
Texas	73,092	29,112	102,204	234,572	408,880
Mountain	**160,120**	**61,233**	**221,354**	**305,811**	**625,880**
Arizona	0	0	0	0	0
Colorado	20,260	19,739	40,000	31,209	84,377
Idaho	0	0	0	0	0
Montana	103,414	15,200	118,614	195,930	338,760
Nevada	0	0	0	0	0
New Mexico	10,600	12,902	23,502	18,720	91,860
Utah	0	4,140	4,140	1,025	5,237
Wyoming	25,846	9,252	35 098	58,927	105,646
Pacific	**151,694**	**109,133**	**260,827**	**156,333**	**530,223**
Alaska	0	0	0	0	0
California	151,694	87,833	239,527	146,676	497,824
Hawaii	0	0	0	0	0
Oregon	0	0	0	0	0
Washington	0	21,300	21,300	9,657	32,399

a. In some states or regions, the difference between the sum of the components and Ultimate Reservoir Capacity represents presently unused capacity.

Source: Same as Table 4-1.

SECTION 5
DISTRIBUTION AND TRANSMISSION

	1985	% Change 85/84
Miles of Pipeline		
(Thousands)		
Total	1,118.9	+ 1.5
Field & Gathering	94.3	+ 0.7
Transmission	271.2	− 0.6
Distribution	753.4	+ 2.2
Miles Installed		
(Thousands)	19.1	+17.2

TABLE 5-1
GAS UTILITY INDUSTRY MILES OF PIPELINE AND MAIN, BY TYPE, 1960-1985[a]

(Thousands)

Year	Total	Field and Gathering	Transmission Pipeline[b]	Distribution Main
1960	630.9	55.8	183.7	391.4
1961	659.0	56.7	191.9	410.4
1962	683.2	58.7	196.4	428.1
1963	709.9	60.7	200.9	448.3
1964	736.2	61.0	205.4	469.8
1965	767.5	61.7	211.3	494.5
1966	799.6	63.0	217.0	519.6
1967	828.3	63.7	225.4	539.2
1968	861.6	64.4	234.5	562.7
1969	891.6	64.9	248.1	578.6
1970	913.3	66.3	252.2	594.8
1971	931.4	66.2	254.8	610.4
1972	948.1	66.9	258.1	623.1
1973	962.9	65.9	263.1	633.8
1974	974.1	66.4	262.2	645.6
1975	979.3	68.5	262.6	648.2
1976	987.7	70.3	258.2	659.1
1977	998.9	71.5	260.5	666.9
1978	1,013.0	74.9	260.6	677.5
1979	1,029.8	77.8	263.5	688.5
1980	1,051.8	83.5	266.5	701.8
1981	1,069.8	86.2	269.5	714.1
1982	1,083.4	90.5	271.7	721.2
1983	1,095.1	91.9	273.5	729.7
1984[R]	1,102.4	93.7	271.9	736.8
1985	1,118.9	94.3	271.2	753.4
Steel	930.2	93.2	266.4	570.6
Plastic[c]	130.6	0.7	4.0	125.9
Other	58.1	0.4	0.8	56.9

a. Includes data for Alaska subsequent to 1960; excludes service pipe. Data not adjusted to common diameter equivalent. Mileage shown as of end of each year.

b. Includes 5.0 thousand miles of Underground Storage pipe in 1975, 5.3 thousand miles in 1976, 5.2 thousand miles in 1977, 6.0 thousand miles in 1978, 5.7 thousand miles in 1979, 6.2 thousand miles in 1980, 7.8 thousand miles in 1981, 5.5 thousand miles in 1982, 5.9 thousand miles in 1983 and 1984, 6.0 thousand miles in 1985, some of which was formerly included in Field and Gathering pipe.

c. Includes fiberglass.

R - Revised.

TABLE 5-2
GAS UTILITY INDUSTRY MILES OF PIPELINE AND MAIN, BY STATE, 1960-1985[a]

Division and State	1960	1965	1970	1975	1980	1984[R]	1985
United States	**630,950**	**767,520**	**913,267**	**979,263**	**1,051,774**	**1,102,401**	**1,118,875**
New England	**19,140**	**22,090**	**25,686**	**26,580**	**27,794**	**28,099**	**28,476**
Connecticut	4,300	4,960	5,728	5,991	6,710	6,454	6,550
Maine	390	390	705	461	395	409	411
Massachusetts	11,910	13,740	15,609	16,452	16,719	17,203	17,359
New Hampshire	630	800	1,041	1,093	1,163	1,218	1,283
Rhode Island	1,720	1,990	2,299	2,248	2,403	2,425	2,463
Vermont	190	210	304	335	404	390	410
Middle Atlantic	**92,600**	**102,580**	**111,644**	**113,993**	**116,439**	**120,762**	**121,682**
New Jersey	15,140	18,320	21,052	22,077	22,838	24,039	24,598
New York	33,020	36,580	39,955	40,535	41,394	42,288	42,334
Pennsylvania	44,440	47,680	50,637	51,381	52,207	54,435	54,750
East North Central	**113,420**	**147,640**	**178,268**	**190,172**	**200,361**	**205,288**	**206,889**
Illinois	27,770	38,750	46,683	50,252	53,375	54,268	54,541
Indiana	14,800	20,240	25,264	27,267	28,227	30,180	30,608
Michigan	21,860	30,370	37,699	40,203	44,100	44,407	44,694
Ohio	40,150	44,690	49,393	51,505	52,667	53,761	54,110
Wisconsin	8,840	13,590	19,229	20,945	21,992	22,672	22,936
West North Central	**67,640**	**82,250**	**99,536**	**106,134**	**112,901**	**116,399**	**115,855**
Iowa	9,970	13,630	16,654	17,273	17,892	18,337	18,254
Kansas	25,860	28,780	32,802	34,280	36,893	38,031	37,093
Minnesota	8,090	10,680	14,162	15,264	16,720	18,067	18,259
Missouri	11,950	15,150	18,654	20,897	21,854	21,704	21,875
Nebraska	8,910	10,300	12,627	13,333	14,079	14,345	14,381
North Dakota	1,100	1,560	2,332	2,533	2,854	3,152	3,208
South Dakota	1,760	2,150	2,305	2,554	2,609	2,763	2,785
South Atlantic	**59,100**	**74,180**	**92,738**	**100,496**	**103,960**	**109,324**	**112,722**
Delaware	830	1,160	1,270	1,322	1,336	1,477	1,428
District of Columbia	1,160	1,150	1,164	1,163	1,157	1,162	1,161
Florida	6,400	8,330	11,435	13,100	12,902	13,567	14,974
Georgia	10,580	14,600	19,549	22,679	24,676	26,389	27,190
Maryland	5,400	6,710	7,986	8,534	8,704	8,857	8,888
North Carolina	4,830	7,080	10,605	11,100	11,842	12,928	13,298
South Carolina	3,320	6,090	8,514	9,667	9,825	10,360	11,092
Virginia	6,490	8,190	10,451	10,944	11,226	12,034	12,315
West Virginia	20,090	20,870	21,764	21,987	22,292	22,550	22,376
East South Central	**44,930**	**54,390**	**65,441**	**70,345**	**73,807**	**77,167**	**78,485**
Alabama	11,380	13,860	16,607	17,832	19,556	20,210	20,779
Kentucky	13,130	15,470	18,295	19,816	19,981	20,959	20,991
Mississippi	11,420	13,460	16,403	17,056	17,911	18,522	18,666
Tennessee	9,000	11,600	14,136	15,641	16,359	17,476	18,049
West South Central	**127,120**	**150,260**	**182,752**	**194,820**	**216,394**	**232,151**	**237,776**
Arkansas	10,380	13,060	16,429	17,474	18,312	18,505	20,390
Louisiana	24,970	30,310	36,921	38,855	41,689	44,083	44,784
Oklahoma	19,590	23,850	28,532	32,798	37,132	40,949	42,594
Texas	72,180	83,040	100,870	105,693	119,261	128,614	130,008
Mountain	**44,940**	**59,000**	**71,848**	**83,184**	**97,391**	**105,126**	**107,410**
Arizona	9,630	11,120	13,379	15,197	16,669	17,112	17,341
Colorado	8,080	12,240	15,870	19,192	23,108	26,156	26,837
Idaho	1,490	2,770	3,226	3,785	4,177	4,540	4,589
Montana	5,120	5,970	6,324	7,435	8,822	8,897	8,965
Nevada	660	1,940	2,470	2,945	3,554	3,852	3,933
New Mexico	13,160	15,410	19,050	21,657	24,581	25,783	26,684
Utah	3,400	4,940	5,609	6,577	7,846	8,895	9,050
Wyoming	3,400	4,610	5,920	6,396	8,634	9,891	10,011
Pacific	**62,060**	**75,130**	**85,354**	**93,539**	**102,727**	**108,085**	**109,580**
Alaska	b	250	667	868	1,186	1,511	1,511
California	52,280	60,650	66,328	72,493	79,625	83,450	84,688
Hawaii	440	490	530	581	587	590	590
Oregon	3,940	6,360	8,014	8,838	9,709	10,335	10,390
Washington	5,400	7,380	9,815	10,759	11,620	12,199	12,401

a. Includes field, gathering, underground storage, transmission and distribution main but excludes service pipe. Data not adjusted to common diameter equivalent. Mileage shown as of end of year.
b. Not available.
R–Revised.

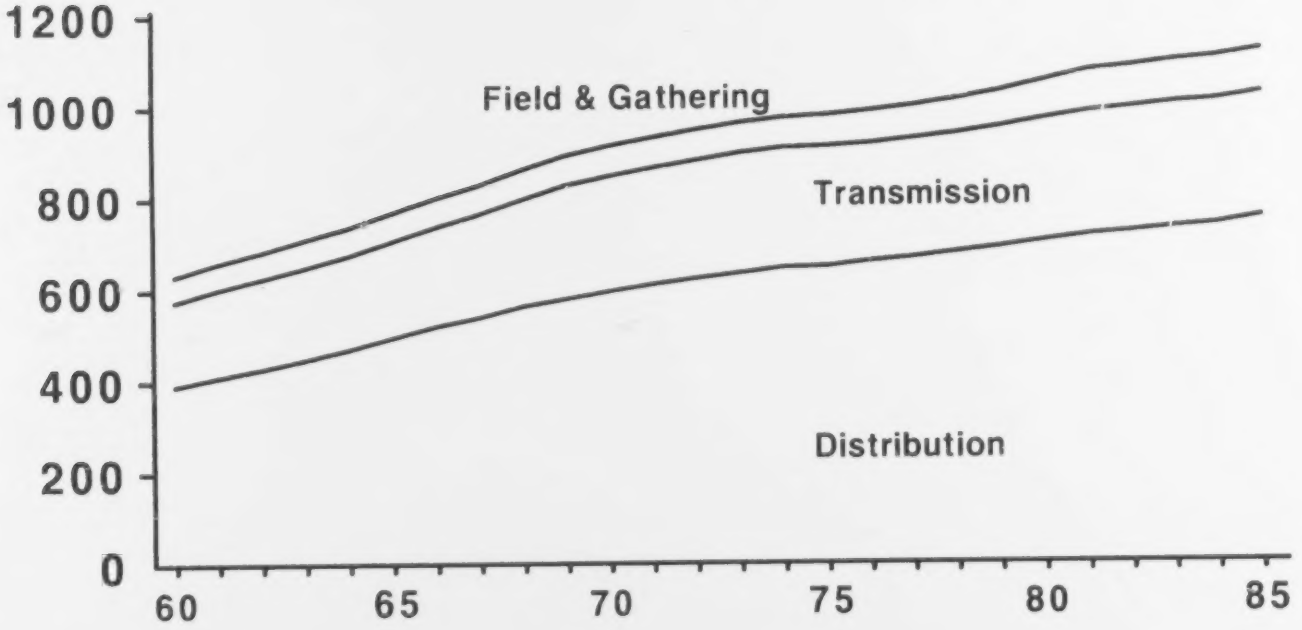
TABLE 5-3
GAS UTILITY INDUSTRY MILES OF PIPELINE AND MAIN, BY STATE AND TYPE OF MAIN, 1985[a]

Division and State	Total	Field and Gathering	Transmission Pipeline[b]	Distribution Main
United States	**1,118,875**	**94,322**	**271,162**	**753,391**
New England	**28,476**	**0**	**1,695**	**26,781**
Connecticut	6,550	0	501	6,049
Maine	411	0	77	334
Massachusetts	17,359	0	859	16,500
New Hampshire	1,283	0	150	1,133
Rhode Island	2,463	0	53	2,410
Vermont	410	0	55	355
Middle Atlantic	**121,682**	**7,144**	**17,823**	**96,715**
New Jersey	24,598	0	1,451	23,147
New York	42,334	532	3,757	38,045
Pennsylvania	54,750	6,612	12,615	35,523
East North Central	**206,889**	**4,475**	**35,856**	**166,558**
Illinois	54,541	90	9,887	44,564
Indiana	30,608	219	5,706	24,683
Michigan	44,694	115	7,091	37,488
Ohio	54,110	4,051	9,968	40,091
Wisconsin	22,936	0	3,204	19,732
West North Central	**115,355**	**8,757**	**39,318**	**67,780**
Iowa	18,254	87	5,885	12,282
Kansas	37,093	8,389	15,213	13,491
Minnesota	18,259	0	4,232	14,027
Missouri	21,875	25	4,343	17,507
Nebraska	14,381	46	7,539	6,796
North Dakota	3,208	194	1,147	1,867
South Dakota	2,785	16	959	1,810
South Atlantic	**112,722**	**9,433**	**21,686**	**81,603**
Delaware	1,428	0	287	1,141
District of Columbia	1,161	0	23	1,138
Florida	14,974	0	2,953	12,021
Georgia	27,190	0	4,976	22,214
Maryland	8,888	23	799	8,066
North Carolina	13,298	0	2,289	11,009
South Carolina	11,092	0	2,425	8,667
Virginia	12,315	122	2,486	9,707
West Virginia	22,376	9,288	5,448	7,640
East South Central	**78,485**	**4,179**	**27,344**	**46,962**
Alabama	20,779	7	5,271	15,501
Kentucky	20,991	3,908	7,229	9,854
Mississippi	18,666	264	9,639	8,763
Tennessee	18,049	0	5,205	12,844
West South Central	**237,776**	**37,139**	**86,789**	**113,848**
Arkansas	20,390	1,317	6,581	12,492
Louisiana	44,784	2,849	24,637	17,298
Oklahoma	42,594	12,414	12,636	17,544
Texas	130,008	20,559	42,935	66,514
Mountain	**107,410**	**22,211**	**29,304**	**55,895**
Arizona	17,341	2	5,111	12,228
Colorado	26,837	4,222	7,054	15,561
Idaho	4,589	0	1,524	3,065
Montana	8,965	2,259	3,303	3,403
Nevada	3,933	8	1,132	2,793
New Mexico	26,684	11,358	6,454	8,872
Utah	9,050	1,029	1,076	6,945
Wyoming	10,011	3,333	3,650	3,028
Pacific	**109,580**	**984**	**11,347**	**97,249**
Alaska	1,511	7	314	1,190
California	84,688	977	7,660	76,051
Hawaii	590	0	0	590
Oregon	10,390	0	1,387	9,003
Washington	12,401	0	1,986	10,415

a. Excludes 388,650 miles of service pipe. Data not adjusted to common diameter equivalent. Mileage shown as of end of year.
b. Includes 5,998 miles of underground storage pipe.

CHART 5-1

GAS UTILITY INDUSTRY MILES OF PIPELINE AND MAIN (THOUSANDS OF MILES)



REFERENCE: TABLE 5-1

TABLE 5-4
GAS UTILITY INDUSTRY MILES OF PIPELINE AND MAIN INSTALLED DURING 1985, BY STATE AND BY TYPE OF PIPE[a]

Division and State	Total[b]	Field and Gathering	Transmission Pipeline	Distribution Main			
		Steel	Steel[c]	Total	Steel	Plastic[d]	Other
United States	**19,108**	**968**	**3,131**	**15,009**	**4,515**	**10,397**	**97**
New England	**565**	**0**	**50**	**515**	**139**	**358**	**18**
Connecticut	129	0	8	121	37	84	0
Maine	3	0	0	3	0	3	0
Massachusetts	285	0	23	262	57	204	1
New Hampshire	83	0	19	64	31	16	17
Rhode Island	45	0	0	45	4	41	0
Vermont	20	0	0	20	10	10	0
Middle Atlantic	**1,828**	**50**	**218**	**1,560**	**376**	**1,184**	**0**
New Jersey	703	0	50	653	181	472	0
New York	561	2	40	519	89	430	0
Pennsylvania	564	48	128	388	106	282	0
East North Central	**2,671**	**67**	**169**	**2,435**	**907**	**1,500**	**28**
Illinois	837	0	6	831	640	191	0
Indiana	677	0	55	622	51	551	20
Michigan	446	2	77	367	16	343	8
Ohio	394	65	31	298	156	142	0
Wisconsin	317	0	0	317	44	273	0
West North Central	**1,344**	**84**	**89**	**1,171**	**328**	**834**	**9**
Iowa	99	0	3	96	28	68	0
Kansas	480	84	71	325	182	134	9
Minnesota	355	0	9	346	21	325	0
Missouri	258	0	4	254	52	202	0
Nebraska	64	0	1	63	25	38	0
North Dakota	59	0	1	58	12	46	0
South Dakota	29	0	0	29	8	21	0
South Atlantic	**2,697**	**16**	**72**	**2,609**	**1,607**	**997**	**5**
Delaware	24	0	0	24	0	24	0
District of Columbia	6	0	0	6	2	4	0
Florida	393	0	9	384	298	86	0
Georgia	714	0	42	672	643	29	0
Maryland	80	0	2	78	33	45	0
North Carolina	384	0	6	378	86	292	0
South Carolina	612	0	1	611	340	271	0
Virginia	353	14	6	333	151	177	5
West Virginia	131	2	6	123	54	69	0
East South Central	**1,276**	**83**	**240**	**953**	**314**	**621**	**18**
Alabama	295	0	81	214	67	146	1
Kentucky	288	83	85	120	66	54	0
Mississippi	241	0	70	171	21	133	17
Tennessee	452	0	4	448	160	288	0
West South Central	**4,854**	**304**	**2,124**	**2,426**	**301**	**2,108**	**17**
Arkansas	125	45	9	71	2	69	0
Louisiana	468	36	263	169	27	131	11
Oklahoma	1,029	81	624	324	6	318	0
Texas	3,232	142	1,228	1,862	266	1,590	6
Mountain	**1,574**	**330**	**103**	**1,141**	**223**	**916**	**2**
Arizona	190	1	7	182	16	166	0
Colorado	609	109	37	463	73	390	0
Idaho	53	0	3	50	2	48	0
Montana	86	16	0	70	14	56	0
Nevada	86	0	0	86	7	79	0
New Mexico	387	104	30	253	94	159	0
Utah	10	9	1	0	0	0	0
Wyoming	153	91	25	37	17	18	2
Pacific	**2,299**	**34**	**66**	**2,199**	**320**	**1,879**	**0**
Alaska	0	0	0	0	0	0	0
California	1,862	34	66	1,762	174	1,588	0
Hawaii	0	0	0	0	0	0	0
Oregon	199	0	0	199	102	97	0
Washington	238	0	0	238	44	194	0

a. Excludes service pipe. Data not adjusted to common diameter equivalent.
b. Does not include 217 miles of plastic and other pipe classified as field and gathering and transmission pipe.
c. Includes 36 miles of underground storage pipe.
d. Includes fiberglass.

TABLE 5-5
GAS UTILITY INDUSTRY REQUIREMENTS OF STEEL PIPE FOR NEW CONSTRUCTION AND MAINTENANCE AND REPAIR BY SIZE OF PIPE, 1985

(Miles)

Size of Pipe	Total	New Construction	Maintenance Repair
Normal Pipe Size—Inches			
⅛ and less	1,021.1	892.5	128.6
1	279.5	173.1	106.4
1¼	317.2	273.3	43.9
1½	144.7	136.6	8.1
Outside Diameter—Inches			
2⅜	2,287.4	1,854.5	432.9
3½	367.7	336.8	30.9
4½	1,449.6	1,231.1	218.5
6⅝	1,076.6	892.1	184.5
8⅝	1,358.1	1,240.6	117.5
10¾	349.4	328.9	20.5
12¾	432.1	391.6	40.5
14	5.6	0.9	4.7
16	109.9	69.2	40.7
18	3.1	0.0	3.1
20	70.1	49.5	20.6
22	14.2	13.5	0.7
24	105.7	95.9	9.8
26	7.7	7.6	0.1
30	115.2	113.4	1.8
34	0.0	0.0	0.0
36	87.2	84.8	2.4
42	13.5	13.5	0.0
Other Sizes	0.4	0.0	0.4
Total	**9,616.0**	**8,199.4**	**1,416.6**

TABLE 5-6
GAS UTILITY INDUSTRY INSTALLED COMPRESSOR HORSEPOWER, 1960-1985

(Thousands)

Year	Total	Transmission
1960	7,843	6,359
1965	9,708	7,736
1966	10,242	8,182
1967	10,746	8,596
1968	11,438	9,146
1969	12,742	9,375
1970	13,150	9,692
1971	14,142	10,763
1972	14,506	10,976
1973	14,858	11,272
1974	15,181	11,883[a]
1975	15,413	12,069
1976	15,472	12,046
1977	15,553	12,105
1978	15,824	12,255
1979	16,030	12,437
1980	16,375	13,091
1981	16,601	13,270
1982	16,965	13,441
1983	16,900	13,499
1984	16,880	13,836
1985	16,567	13,739

a. Not comparable to previous years due to reclassification.

TABLE 5–7
SELECTED STATISTICS FOR MAJOR TRANSMISSION COMPANIES, 1985

Name of Transmission System	No. of Transmission Compressor Stations	Total Miles of Transmission Pipeline	Peak Day Sendout (MMCF)	Operating Revenues ($000,000)
Algonquin Gas Transmission Co.	4	937	940	$ 701.3
ANR Pipeline Co.	39	7,723	3,419	2,392.7
Colorado Interstate Gas Co.	27	2,739	1,228	756.2
Columbia Gas Transmission Co.	113	10,643	5,193	3,150.0
Columbia Gulf Transmission Co.	13	4,243	2,133	225.7
Consolidated Gas Transmission Corp.	42	3,551	2,786	2,103.0
East Tennessee Natural Gas Co.	11	1,023	401	269.4
El Paso Natural Gas Co.	53	9,345	3,009	3,953.0
Florida Gas Transmission Co.	20	4,366	897	745.7
Internorth, Inc.	173	14,817	3,615	2,554.1
Midwestern Gas Transmission Co.	14	903	1,179	628.8
Mississippi River Transmission Co.	15	1,968	951	620.0
Natural Gas Pipeline Co. of America	71	8,207	5,181	3,113.5
Northwest Central Pipeline Co.	41	5,845	1,849	869.8
Pacific Gas Transmission Co.	12	799	1,109	1,043.7
Panhandle Eastern Pipeline Co.	68	6,780	2,085	1,653.6
South Georgia Natural Gas Co.	2	767	a	110.0
Southern Natural Gas Co.	49	7,625	2,363	1,825.0
Tenneco, Inc.	63	14,069	3,527	2,685.4
Texas Eastern Transmission Co.	74	9,658	4,285	2,757.2
Texas Gas Transmission Corp.	24	5,749	2,921	1,592.1
Transcontinental Gas Pipeline Corp.	38	10,308	7,337	2,713.9
Transwestern Pipeline Co.	183	4,439	839	847.2
Trunkline Gas Co.	21	4,020	1,263	1,006.5
United Gas Pipeline Co.	35	7,288	2,140	1,531.6

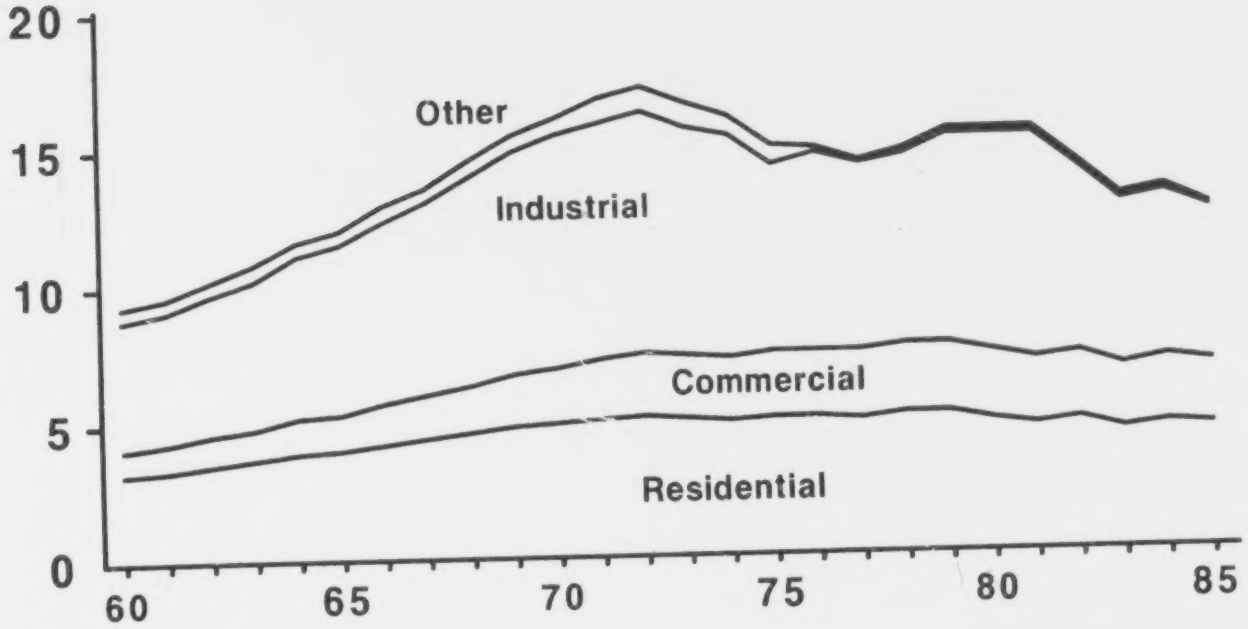
a. Not available.
Source: Federal Energy Regulatory Commission, FERC Form No. 2: Annual Report of Natural Gas Companies (Class A and Class B), 1985.

SECTION 6
SALES—QUANTITIES

	1985	% Change 85/84
Gas Utility Industry		
(Trillions of Btu)		
Total Sales	12,615.5	− 4.2
Residential	4,513.0	− 2.5
Commercial	2,338.1	− 2.4
Industrial	5,634.9	− 5.9
Industrial Only	3,686.2	−13.1
Electric Generation	1,948.7	+11.3
Other	129.5	−11.5
Resale	10,408.1	−16.3

CHART 6-1

GAS UTILITY SALES BY CLASS OF SERVICE (QUADRILLIONS OF BTU)



REFERENCE: TABLE 6-1

TABLE 6-1
GAS UTILITY INDUSTRY SALES, BY CLASS OF SERVICE
1960-1985[a]

(Trillions of Btu)

Year	Total	Residential	Commercial	Industrial[b]	Other[b]
1960	9,287.7	3,188.1	919.8	4,709.4	470.4
1961	9,589.0	3,321.0	988.1	4,785.6	494.3
1962	10,234.8	3,536.9	1,092.9	5,100.1	504.9
1963	10,766.3	3,668.0	1,136.6	5,438.1	523.6
1964	11,591.2	3,869.7	1,273.5	5,912.0	536.0
1965	11,980.3	3,999.0	1,344.8	6,146.5	490.0
1966	12,859.1	4,175.4	1,462.8	6,653.3	567.6
1967	13,488.3	4,365.3	1,577.6	7,014.3	531.1
1968	14,472.4	4,552.7	1,704.9	7,595.1	619.7
1969	15,391.6	4,820.4	1,878.1	8,135.8	557.3
1970	16,043.5	4,923.7	2,006.6	8,439.2	674.0
1971	16,685.7	5,040.1	2,155.5	8,645.5	844.7
1972	17,082.1	5,141.8	2,275.7	8,775.7	888.8
1973	16,479.9	4,993.6	2,280.8	8,370.8	834.7
1974	16,000.3	4,864.8	2,293.4	8,153.2	689.0
1975	14,862.9	4,991.0	2,586.8	6,837.1	648.0
1976	14,813.5	5,014.2	2,422.6	7,192.0	184.6
1977	14,340.9	4,946.3	2,409.4	6,796.4	188.9
1978	14,748.4	5,106.7	2,499.5	6,931.5	210.7
1979	15,440.3	5,083.1	2,485.8	7,641.4	230.0
1980	15,413.2	4,826.1	2,453.3	7,956.6	177.2
1981	15,374.8	4,609.7	2,375.4	8,239.3	150.4
1982	14,182.7	4,769.8	2,471.3	6,794.3	147.3
1983	12,857.5	4,449.6	2,298.2	5,969.4	140.2
1984[R]	13,161.7	4,628.3	2,396.0	5,991.0	146.4
1985	12,615.5	4,513.0	2,338.1	5,634.9	129.5

a. Excludes data for Alaska prior to 1961.
b. Prior to 1976, "Other" electric generation (see Table 6-12) is included in the "Other" class of service. For 1976 and beyond all electric generation is included in the Industrial category.
R–Revised.

TABLE 6-2
GAS UTILITY INDUSTRY SALES, BY CLASS OF SERVICE AND TYPE OF COMPANY 1979-1985[a]

(Trillions of Btu)

	1979	1980	1981	1982	1983	1984	1985
Distribution							
Total	**4,151**	**3,983**	**3,136**	**2,981**	**2,925**	**3,078**	**3,803**
Residential	1,797	1,718	1,240	1,259	1,282	1,358	1,696
Commercial	899	901	737	771	727	780	948
Industrial	1,424	1,334	1,145	938	897	919	1,131
Other	31	30	14	13	20	21	28
Transmission							
Total	**2,039**	**2,616**	**2,689**	**2,087**	**1,826**	**1,711**	**1,708**
Residential	2	2	1	1	1	1	1
Commercial	4	8	7	7	3	4	3
Industrial	2,035	2,577	2,657	2,055	1,806	1,687	1,689
Other	19	29	24	24	17	20	15
Integrated							
Total	**4,724**	**4,423**	**5,197**	**4,910**	**4,203**	**4,290**	**2,922**
Residential	1,458	1,359	1,719	1,799	1,560	1,626	1,086
Commercial	698	655	778	804	739	782	522
Industrial	2,455	2,359	2,645	2,254	1,864	1,841	1,294
Other	113	50	55	53	40	41	20
Combination							
Total	**3,807**	**3,705**	**3,681**	**3,543**	**3,268**	**3,419**	**3,578**
Residential	1,519	1,454	1,369	1,426	1,335	1,358	1,464
Commercial	756	763	725	755	703	690	728
Industrial	1,491	1,446	1,549	1,325	1,192	1,331	1,339
Other	42	42	38	38	39	39	47
Municipals							
Total	**701**	**686**	**672**	**662**	**635**	**664**	**605**
Residential	308	293	281	285	271	286	266
Commercial	129	126	128	134	126	141	137
Industrial	236	241	244	224	212	213	182
Other	28	26	19	20	25	25	20

a. All electric generation is included in the Industrial category.

Note: This table depicts total sales as shown on Table 6-1, by company type. Also, data by company type not directly comparable from year to year due to acquisitions and mergers. See page ix.

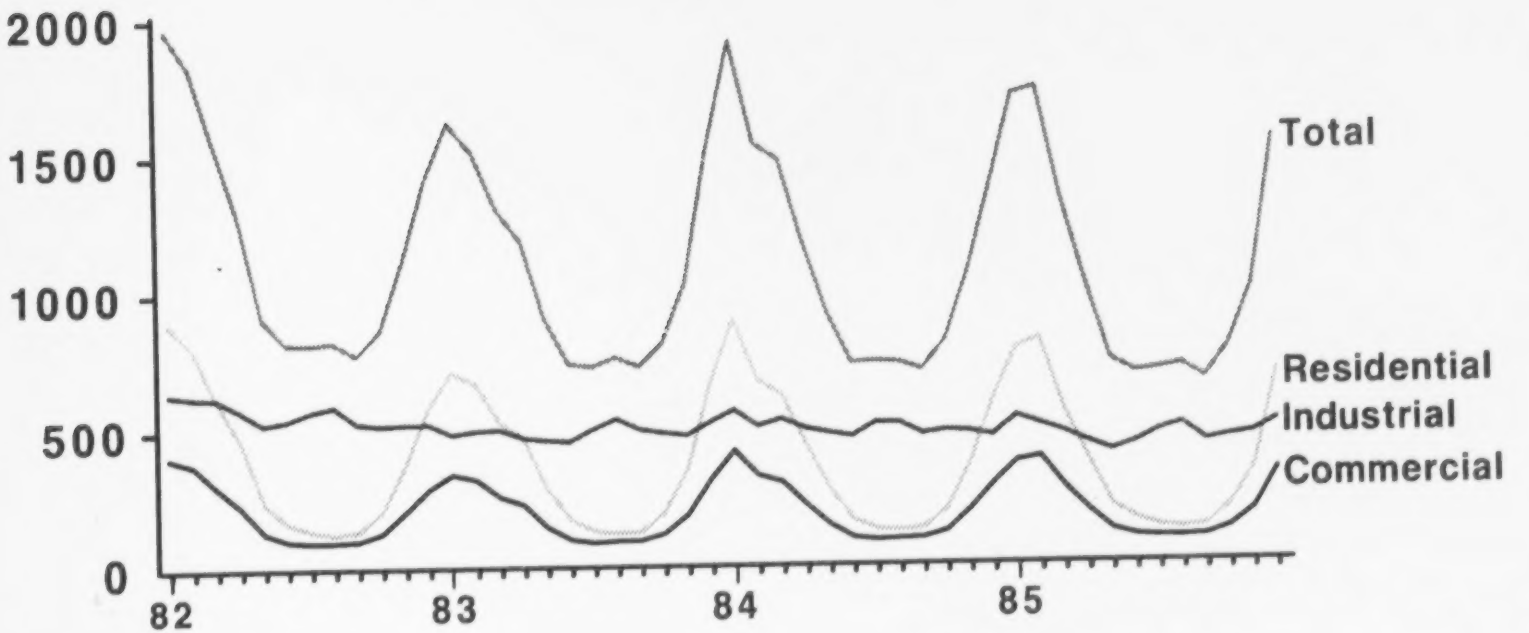
TABLE 6-3
GAS UTILITY INDUSTRY SALES, BY QUARTER AND CLASS OF SERVICE
1960-1985

(Trillions of Btu)

Year and Quarter	Total	Residential	Commercial	Industrial[a]	Other[a]
1960					
First	3,124.9	1,459.0	404.6	1,119.7	141.6
Second	2,171.3	679.8	188.0	1,197.1	106.4
Third	1,676.1	265.5	92.7	1,222.1	95.8
Fourth	2,309.7	780.0	232.8	1,170.3	126.6
1965					
First	3,946.6	1,811.2	575.2	1,424.3	135.9
Second	2,818.1	878.9	291.2	1,538.8	109.2
Third	2,212.1	346.1	144.9	1,603.3	117.8
Fourth	3,001.0	961.1	332.8	1,580.0	127.1
1970					
First	5,262.3	2,286.9	867.7	1,939.2	168.6
Second	3,808.1	1,024.3	423.8	2,201.4	158.4
Third	3,041.5	420.7	218.6	2,236.1	166.0
Fourth	3,931.6	1,191.8	496.5	2,062.5	181.0
1975					
First	4,931.5	2,192.8	970.4	1,598.7	169.6
Second	3,520.9	1,137.7	536.3	1,715.9	131.0
Third	2,794.9	474.9	301.2	1,842.2	176.6
Fourth	3,615.6	1,185.6	579.0	1,680.2	170.8
1978					
First	5,290.3	2,460.1	1,098.9	1,658.1	73.1
Second	3,220.5	960.2	491.4	1,724.8	44.2
Third	2,613.5	426.6	294.7	1,851.8	40.4
Fourth	3,624.1	1,259.9	614.5	1,696.8	53.0
1979					
First	5,479.5	2,462.8	1,095.8	1,828.2	92.7
Second	3,366.0	965.7	486.3	1,870.8	43.2
Third	2,715.4	431.2	283.8	1,966.5	33.9
Fourth	3,879.4	1,223.4	619.9	1,975.9	60.2
1980					
First	5,433.8	2,218.7	1,031.1	2,118.8	65.2
Second	3,258.8	914.7	464.5	1,845.8	33.8
Third	2,753.6	405.4	300.0	2,019.5	28.7
Fourth	3,967.0	1,287.3	657.7	1,972.5	49.5
1981					
First	5,311.9	2,170.9	1,007.6	2,075.6	57.8
Second	3,385.2	797.5	430.2	2,127.5	30.0
Third	2,792.7	399.5	293.6	2,076.8	22.8
Fourth	3,885.0	1,241.8	644.0	1,959.4	39.8
1982					
First	5,350.7	2,318.2	1,086.6	1,888.2	57.7
Second	3,020.3	880.9	465.1	1,645.6	28.7
Third	2,416.1	404.4	297.2	1,692.4	22.1
Fourth	3,395.6	1,166.3	622.4	1,568.1	38.8
1983					
First	4,439.2	1,917.5	921.9	1,547.0	52.8
Second	2,835.9	935.1	477.3	1,393.3	30.2
Third	2,220.5	382.2	277.4	1,540.6	20.3
Fourth	3,361.9	1,214.9	621.6	1,488.5	36.9
1984					
First	4,918.2	2,199.7	1,050.1	1,608.3	60.1
Second	2,821.1	882.5	464.2	1,446.0	28.4
Third	2,182.9	383.7	276.5	1,504.2	18.5
Fourth	3,239.5	1,162.4	605.2	1,432.5	39.4
1985					
First	4,761.8	2,161.7	1,030.7	1,515.4	54.0
Second	2,441.5	740.7	400.0	1,277.1	23.7
Third	2,081.8	381.7	269.2	1,413.9	17.0
Fourth	3,330.4	1,228.9	638.2	1,428.5	34.8

a. Prior to 1976, "Other" electric generation (see Table 6-12) is included in the "Other" class of service. For 1976 and beyond all electric generation is included in the Industrial category.

UTILITY SALES OF NATURAL GAS TO CONSUMERS BY MONTHS, 1982 - 1985
(TRILLIONS OF BTU)



REFERENCE: TABLE 6-4

TABLE 6-4
GAS UTILITY INDUSTRY TOTAL SALES, BY MONTH, 1960-1985

(Trillions of Btu)

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
1960	1,031.3	1,015.3	1,078.4	860.1	693.6	617.5	557.4	561.6	557.0	607.4	753.5	948.9	9,282.0
1965	1,304.0	1,329.2	1,313.4	1,168.2	874.9	775.0	748.0	732.8	731.3	823.5	979.4	1,197.9	11,977.6
1970	1,865.8	1,733.0	1,663.0	1,527.7	1,225.7	1,054.3	1,013.5	1,020.2	1,007.5	1,081.1	1,283.7	1,566.4	16,041.9
1971	1,886.8	1,873.5	1,769.5	1,559.1	1,312.2	1,145.2	1,053.3	1,037.4	1,023.7	1,100.9	1,305.7	1,618.4	16,685.7
1972	1,833.1	1,908.1	1,758.3	1,542.6	1,292.5	1,176.1	1,056.1	1,125.9	1,094.5	1,120.0	1,378.7	1,796.2	17,082.1
1973	1,909.4	1,752.8	1,645.3	1,500.1	1,332.1	1,143.8	1,104.8	1,069.0	1,063.1	1,136.5	1,306.7	1,516.3	16,479.9
1974	1,847.6	1,707.2	1,630.7	1,493.6	1,251.6	1,119.9	1,050.8	1,034.9	992.3	1,115.2	1,219.8	1,536.7	16,000.3
1975	1,709.5	1,633.6	1,588.4	1,455.3	1,120.8	944.8	924.7	934.8	935.4	1,009.2	1,102.8	1,503.6	14,862.9
1976	1,797.5	1,644.6	1,451.0	1,252.2	1,099.8	965.6	913.1	900.8	899.1	996.4	1,278.3	1,614.7	14,813.5
1977	1,901.9	1,682.7	1,425.7	1,168.4	974.8	904.5	875.8	866.5	860.7	976.7	1,153.5	1,549.8	14,340.9
1978	1,808.7	1,834.1	1,647.5	1,237.7	1,061.4	921.4	895.1	878.8	839.6	947.7	1,151.1	1,525.5	14,748.4
1979	1,925.1	1,923.8	1,630.5	1,356.3	1,074.6	934.9	903.7	920.9	891.3	1,038.9	1,253.4	1,587.0	15,440.4
1980	1,834.5	1,871.1	1,728.2	1,315.2	1,024.5	919.1	928.3	919.0	906.3	1,024.6	1,286.9	1,655.5	15,413.2
1981	1,957.2	1,759.7	1,595.0	1,274.4	1,107.7	1,003.1	957.8	933.4	901.5	1,045.1	1,234.9	1,605.0	15,374.8
1982	1,964.4	1,831.3	1,555.0	1,288.9	911.8	819.6	816.7	823.6	775.8	864.7	1,117.5	1,413.4	14,182.7
1983	1,619.9	1,513.6	1,305.7	1,189.1	906.1	740.7	728.5	762.7	729.3	809.6	1,029.7	1,522.6	12,857.5
1984	1,907.9	1,532.8	1,477.5	1,172.3	912.8	736.0	739.9	736.2	706.8	812.5	1,054.5	1,372.5	13,161.7
1985	1,705.1	1,729.6	1,327.1	1,013.7	736.5	691.3	699.8	716.0	666.0	784.4	1,001.6	1,544.4	12,615.5

TABLE 6-5
GAS UTILITY INDUSTRY SALES, BY STATE, 1960-1985[a]

(Trillions of Btu)

Division and State	1960	1965	1970	1975	1980	1984	1985
United States	**9,287.7**	**11,980.3**	**16,043.5**	**14,862.9**	**15,413.2**	**13,161.7**	**12,615.5**
New England	**120.5**	**172.0**	**236.7**	**243.5**	**298.2**	**344.8**	**348.5**
Connecticut	31.5	44.0	61.4	61.0	73.4	80.5	78.6
Maine	1.3	1.3	1.8	2.0	2.2	2.4	2.6
Massachusetts	72.4	105.0	139.5	145.9	182.5	213.7	220.9
New Hampshire	3.0	4.3	6.7	7.8	9.5	10.5	10.6
Rhode Island	11.9	16.9	25.2	23.4	26.4	32.6	30.6
Vermont	0.4	0.5	2.1	3.4	4.1	5.1	5.2
Middle Atlantic	**993.9**	**1,293.4**	**1,651.0**	**1,495.1**	**1,658.2**	**1,613.6**	**1,499.9**
New Jersey	125.9	194.1	294.9	257.9	322.7	344.8	334.8
New York	358.0	475.6	595.9	581.9	600.8	678.5	639.1
Pennsylvania	510.0	623.7	760.2	655.4	734.7	590.3	526.0
East North Central	**1,872.4**	**2,724.4**	**3,896.4**	**3,749.5**	**3,658.1**	**3,147.8**	**2,897.2**
Illinois	509.5	746.5	1,140.3	1,112.4	1,100.3	996.2	900.9
Indiana	203.9	344.6	505.0	458.8	475.9	438.4	399.0
Michigan	357.2	545.3	839.4	885.8	850.0	711.3	667.6
Ohio	712.5	891.0	1,084.9	929.8	888.0	697.4	624.7
Wisconsin	89.3	197.0	326.8	362.7	343.9	304.4	305.0
West North Central	**1,040.4**	**1,316.0**	**1,743.7**	**1,592.4**	**1,412.3**	**1,182.2**	**1,144.0**
Iowa	157.7	205.6	292.5	298.8	255.8	225.5	216.9
Kansas	305.6	350.4	459.5	410.4	364.6	261.0	248.7
Minnesota	160.4	230.9	324.3	295.0	267.1	248.7	250.8
Missouri	257.2	333.2	421.0	344.5	326.8	266.3	256.2
Nebraska	126.7	153.7	197.8	187.2	152.5	134.6	124.0
North Dakota	8.5	15.6	18.9	24.7	21.6	21.7	22.6
South Dakota	24.3	26.6	29.7	31.8	23.9	24.5	24.8
South Atlantic	**649.8**	**871.8**	**1,311.1**	**1,106.1**	**1,255.7**	**1,197.6**	**1,095.0**
Delaware	8.9	16.6	24.3	19.3	22.7	25.3	22.6
District of Columbia	18.5	21.8	27.1	24.8	27.6	31.0	28.0
Florida	91.1	144.2	218.7	127.4	232.2	238.5	232.9
Georgia	188.5	210.3	333.8	312.5	299.7	295.3	270.5
Maryland	65.9	96.8	145.1	138.8	154.6	137.1	118.5
North Carolina	41.6	73.9	151.2	104.8	143.2	138.4	125.3
South Carolina	40.6	73.9	120.1	118.3	112.3	104.6	94.5
Virginia	64.3	91.3	133.9	116.0	134.8	136.3	124.3
West Virginia	130.4	143.0	156.9	144.3	128.6	91.2	78.4
East South Central	**600.1**	**729.7**	**995.4**	**752.8**	**807.9**	**711.8**	**625.6**
Alabama	180.3	224.8	290.0	227.9	224.6	193.7	179.2
Kentucky	126.6	142.1	189.9	180.0	175.9	158.8	141.7
Mississippi	146.2	177.1	265.6	141.3	191.5	161.8	141.2
Tennessee	147.0	185.7	249.9	203.5	216.0	197.5	163.5
West South Central	**2,216.5**	**2,408.5**	**3,031.0**	**2,973.6**	**3,534.9**	**2,499.6**	**2,330.4**
Arkansas	177.3	228.6	339.9	219.4	207.4	174.5	142.9
Louisiana	536.8	592.0	742.1	457.3	515.2	302.2	285.2
Oklahoma	248.8	255.0	275.6	417.9	472.3	320.1	263.4
Texas	1,253.6	1,332.9	1,673.4	1,878.9	2,340.0	1,702.8	1,638.9
Mountain	**576.4**	**703.8**	**926.1**	**928.6**	**841.9**	**671.2**	**655.4**
Arizona	110.9	127.3	168.1	144.4	136.4	103.4	119.4
Colorado	160.0	196.5	253.6	269.2	242.3	206.3	191.6
Idaho	22.0	34.8	43.1	51.2	45.4	32.3	33.0
Montana	51.3	67.4	78.8	79.8	54.1	43.4	44.0
Nevada	14.2	29.7	56.0	61.3	62.1	41.4	41.5
New Mexico	112.9	106.2	135.6	142.5	125.7	85.6	74.7
Utah	73.1	101.8	119.1	119.4	121.7	115.0	113.2
Wyoming	32.0	40.1	71.8	60.8	54.3	43.7	38.0
Pacific	**1,217.7**	**1,760.7**	**2,252.1**	**2,021.3**	**1,945.9**	**1,793.1**	**2,019.5**
Alaska	b	5.2	16.6	30.7	32.3	38.0	42.6
California	1,115.4	1,580.1	1,986.8	1,735.6	1,700.0	1,547.4	1,762.9
Hawaii	1.6	2.0	2.8	3.6	3.5	3.1	3.1
Oregon	32.0	59.0	88.1	86.8	76.4	76.0	77.2
Washington	68.7	114.4	157.8	164.6	133.8	128.7	133.7

a. Excludes sales for resale.
b. Not available.

TABLE 6-6
GAS UTILITY INDUSTRY SALES OF GAS FOR RESALE, BY STATE
1960-1985

(Trillions of Btu)

Division and State	1960[a]	1965[a]	1970	1975	1980	1984	1985
United States	**9,257.8**	**12,566.4**	**17,575.6**	**14,504.5**	**15,705.1**	**12,437.9**	**10,408.1**
New England	**135.5**	**194.0**	**276.0**	**271.5**	**299.8**	**335.2**	**291.8**
Connecticut			83.0	82.7	76.4	81.7	67.2
Maine			0.0	0.0	0.0	0.0	0.0
Massachusetts			156.6	160.0	188.8	214.7	188.1
New Hampshire			8.6	5.8	6.8	7.8	7.6
Rhode Island			27.8	21.8	27.9	31.0	28.9
Vermont			0.0	1.3	0.0	0.0	0.0
Middle Atlantic	**1,337.4**	**1,827.4**	**2,433.3**	**1,901.6**	**2,334.0**	**2,131.6**	**1,671.4**
New Jersey			491.9	370.2	510.6	549.8	404.7
New York			802.5	572.2	707.5	696.2	566.3
Pennsylvania			1,138.9	959.2	1,115.9	885.7	700.4
East North Central	**1,999.8**	**3,296.3**	**5,249.0**	**4,542.8**	**4,442.0**	**3,455.4**	**2,945.1**
Illinois			1,688.6	1,537.1	1,613.3	1,331.1	1,147.1
Indiana			513.6	406.8	461.4	410.2	325.8
Michigan			698.5	759.4	615.8	479.2	329.7
Ohio			1,892.4	1,356.1	1,315.3	886.1	774.8
Wisconsin			455.9	483.4	436.1	348.8	367.7
West North Central	**759.7**	**975.2**	**1,306.9**	**1,144.5**	**1,043.9**	**887.0**	**903.9**
Iowa			271.0	259.7	208.9	165.9	160.8
Kansas			206.4	169.7	149.4	124.0	127.6
Minnesota			272.6	239.0	239.1	212.1	225.6
Missouri			405.2	338.0	337.8	290.6	275.0
Nebraska			124.7	111.7	86.4	74.6	73.1
North Dakota			5.2	5.5	4.9	2.5	17.4
South Dakota			21.8	20.8	17.5	17.4	24.4
South Atlantic	**1,223.6**	**1,605.2**	**1,981.1**	**1,372.5**	**1,470.3**	**1,115.4**	**893.7**
Delaware			1.1	1.2	1.2	1.4	1.8
District of Columbia			0.0	0.0	0.0	0.0	0.0
Florida			63.4	82.7	94.7	94.4	91.8
Georgia			327.0	315.5	308.7	295.0	257.7
Maryland			183.1	151.0	184.5	108.3	110.1
North Carolina			157.9	118.5	165.8	151.5	124.7
South Carolina			166.5	127.6	135.2	99.4	83.9
Virginia			218.3	181.9	209.1	167.5	155.4
West Virginia			862.8	394.1	371.2	198.0	68.3
East South Central	**1,009.5**	**1,116.2**	**1,573.5**	**1,178.0**	**1,256.5**	**1,060.8**	**745.6**
Alabama			237.0	219.3	219.8	179.1	168.0
Kentucky			417.6	238.4	237.3	197.2	157.8
Mississippi			349.3	263.1	289.1	231.7	127.1
Tennessee			569.6	457.3	510.3	452.8	292.7
West South Central	**1,199.7**	**1,136.4**	**1,497.3**	**1,215.9**	**2,007.4**	**1,096.7**	**818.9**
Arkansas			22.6	16.1	16.0	13.7	12.9
Louisiana			854.6	569.2	661.9	398.9	268.5
Oklahoma			166.6	148.6	206.2	113.3	61.4
Texas			453.6	482.1	1,123.3	570.9	476.1
Mountain	**1,304.2**	**1,562.0**	**2,021.0**	**1,901.8**	**1,871.0**	**1,485.6**	**1,490.5**
Arizona			1,477.8	1,341.0	1,370.5	1,144.1	1,062.6
Colorado			249.0	279.6	261.8	208.7	194.8
Idaho			73.0	84.2	66.7	53.0	50.2
Montana			7.5	7.7	7.6	4.9	17.6
Nevada			5.8	9.5	9.9	9.7	10.3
New Mexico			104.9	71.8	58.6	18.6	37.8
Utah			21.3	7.4	8.4	2.9	75.8
Wyoming			81.6	100.6	87.5	43.7	41.4
Pacific	**288.4**	**853.7**	**1,237.6**	**975.9**	**980.1**	**870.1**	**647.2**
Alaska			0.0	0.0	27.4	0.0	0.0
California			680.5	346.5	436.5	435.7	145.0
Hawaii			0.0	0.0	0.0	0.0	0.0
Oregon			399.9	470.2	388.3	305.7	372.9
Washington			157.2	159.1	127.8	128.8	129.3

a. Includes natural gas only prior to 1970 and state breakdowns not available prior to 1970.

TABLE 6-7
GAS UTILITY INDUSTRY SALES, BY STATE AND CLASS OF SERVICE, 1985

(Trillions of Btu)

Division and State	Total	Class of Service					Average Btu Value
		Residential	Commercial	Industrial	Electric Generation	Other	
United States	**12,615.5**	**4,513.0**	**2,338.1**	**3,686.2**	**1,948.7**	**129.5**	**1,029.8**
New England	**348.5**	**149.6**	**87.4**	**63.2**	**45.7**	**2.6**	**1,026.5**
Connecticut	78.6	33.8	25.2	19.5	0.0	0.1	1,031.2
Maine	2.6	0.5	1.2	0.9	0.0	0.0	1,029.9
Massachusetts	220.9	93.7	50.6	31.5	42.9	2.2	1,026.2
New Hampshire	10.6	4.8	4.1	1.6	0.0	0.1	1,013.6
Rhode Island	30.6	15.2	5.2	7.3	2.8	0.1	1,025.9
Vermont	5.2	1.6	1.1	2.4	0.0	0.1	993.0
Middle Atlantic	**1,499.9**	**732.4**	**315.7**	**341.3**	**76.3**	**34.2**	**1,028.5**
New Jersey	334.8	154.6	85.9	73.6	20.5	0.2	1,040.0
New York	639.1	326.7	118.7	112.7	55.4	25.6	1,022.4
Pennsylvania	526.0	251.1	111.1	155.0	0.4	8.4	1,028.7
East North Central	**2,897.2**	**1,405.1**	**644.0**	**831.5**	**7.5**	**9.1**	**1,020.9**
Illinois	900.9	454.0	214.5	227.8	4.4	0.2	1,022.0
Indiana	399.0	146.9	68.0	182.3	0.2	1.6	990.6
Michigan	667.6	345.7	159.6	160.9	1.1	0.3	1,017.8
Ohio	624.7	340.8	142.1	134.6	0.4	6.8	1,037.8
Wisconsin	305.0	117.7	59.8	125.9	1.4	0.2	1,029.2
West North Central	**1,144.0**	**462.2**	**276.5**	**383.8**	**14.1**	**7.4**	**1,004.1**
Iowa	216.9	79.2	47.5	88.1	1.8	0.3	1,012.2
Kansas	248.7	77.8	45.6	112.8	8.2	4.3	994.8
Minnesota	250.8	106.5	57.2	85.3	1.0	0.8	1,004.5
Missouri	256.2	129.1	72.3	51.0	2.1	1.7	1,011.8
Nebraska	124.0	47.9	35.1	39.7	1.0	0.3	993.8
North Dakota	22.6	10.4	10.9	1.3	a	a	1,000.4
South Dakota	24.8	11.3	7.9	5.6	a	a	1,001.5
South Atlantic	**1,095.0**	**314.0**	**235.1**	**420.3**	**119.9**	**5.7**	**1,035.7**
Delaware	22.6	6.5	3.5	11.7	0.9	a	1,037.2
District of Columbia	28.0	11.8	16.2	0.0	0.0	0.0	1,026.0
Florida	232.9	13.6	31.0	67.5	117.9	2.9	1,046.7
Georgia	270.5	90.1	53.8	125.4	0.8	0.4	1,026.9
Maryland	118.5	63.4	30.1	24.9	a	0.1	1,036.0
North Carolina	125.3	30.1	26.9	68.2	a	0.1	1,035.5
South Carolina	94.5	16.6	16.2	61.3	0.1	0.3	1,028.8
Virginia	124.3	43.2	37.6	41.6	0.0	1.9	1,031.7
West Virginia	78.4	38.7	19.8	19.7	0.2	a	1,064.7
East South Central	**625.6**	**175.0**	**110.0**	**284.3**	**43.3**	**13.0**	**1,033.0**
Alabama	179.2	46.8	26.3	105.3	0.1	0.7	1,034.2
Kentucky	141.7	60.8	28.8	46.9	0.0	5.2	1,020.9
Mississippi	141.2	26.8	13.7	52.8	43.2	4.7	1,034.8
Tennessee	163.5	40.6	41.2	79.3	a	2.4	1,041.0
West South Central	**2,330.4**	**399.8**	**227.5**	**783.5**	**880.2**	**39.4**	**1,037.9**
Arkansas	142.9	40.9	27.0	68.0	6.8	0.2	1,012.7
Louisiana	285.2	61.3	23.9	128.8	56.1	15.1	1,055.4
Oklahoma	263.4	77.6	41.4	130.0	14.2	0.2	1,021.9
Texas	1,638.9	220.0	135.2	456.7	803.1	23.9	1,040.1
Mountain	**655.4**	**258.8**	**168.9**	**140.6**	**71.8**	**15.3**	**1,035.0**
Arizona	119.4	30.0	24.6	17.5	44.9	2.4	1,053.8
Colorado	191.6	90.1	65.9	29.9	5.2	0.5	996.1
Idaho	33.0	8.1	9.4	15.5	0.0	0.0	1,046.1
Montana	44.0	20.7	13.9	7.0	0.3	2.1	981.9
Nevada	41.5	13.6	12.9	5.9	8.7	0.4	1,037.1
New Mexico	74.7	27.9	14.3	10.5	12.2	9.8	1,081.6
Utah	113.2	54.4	17.9	40.5	0.4	a	1,075.0
Wyoming	38.0	14.0	10.0	13.8	0.1	0.1	1,015.5
Pacific	**2,019.5**	**616.1**	**273.0**	**437.7**	**689.9**	**2.8**	**1,043.4**
Alaska	42.6	12.8	11.3	0.0	18.5	0.0	1,000.0
California	1,762.9	547.6	206.0	335.5	671.4	2.4	1,045.1
Hawaii	3.1	0.6	0.6	1.9	0.0	0.0	1,026.1
Oregon	77.2	22.1	19.5	35.6	0.0	0.0	1,030.1
Washington	133.7	33.0	35.6	64.7	a	0.4	1,042.3

a. Less than 0.05 trillion Btu.

TABLE 6-8
GAS UTILITY INDUSTRY FIRM AND INTERRUPTIBLE GAS SALES BY STATE, 1985

(Trillions of Btu)

Division and State	Commercial			Industrial[a]		
	Total	Firm	Interruptible	Total	Firm	Interruptible
United States	**2,338.1**	**2,192.7**	**145.4**	**3,686.2**	**2,064.0**	**1,622.2**
New England	**87.4**	**76.4**	**11.0**	**63.2**	**27.9**	**35.3**
Connecticut	25.2	17.2	8.0	19.5	9.7	9.8
Maine	1.2	1.2	0.0	0.9	0.6	0.3
Massachusetts	50.6	47.6	3.0	31.5	14.7	16.8
New Hampshire	4.1	4.1	0.0	1.6	0.6	1.0
Rhode Island	5.2	5.2	0.0	7.3	2.2	5.1
Vermont	1.1	1.1	0.0	2.4	0.1	2.3
Middle Atlantic	**315.7**	**294.7**	**21.0**	**341.3**	**216.3**	**125.0**
New Jersey	85.9	78.1	7.8	73.6	33.7	39.9
New York	118.7	112.7	6.0	112.7	67.4	45.3
Pennsylvania	111.1	103.9	7.2	155.0	115.2	39.8
East North Central	**644.0**	**626.7**	**17.3**	**831.5**	**642.3**	**189.2**
Illinois	214.5	213.0	1.5	227.8	191.1	36.7
Indiana	68.0	63.3	4.7	182.4	156.5	25.9
Michigan	159.6	158.4	1.2	160.9	120.8	40.1
Ohio	142.1	140.8	1.3	134.5	120.9	13.6
Wisconsin	59.8	51.2	8.6	125.9	53.0	72.9
West North Central	**276.5**	**246.0**	**30.5**	**383.8**	**146.2**	**237.6**
Iowa	47.5	39.7	7.8	88.1	59.7	28.4
Kansas	45.6	43.4	2.2	112.8	22.0	90.8
Minnesota	57.2	48.6	8.6	85.3	26.9	58.4
Missouri	72.3	67.4	4.9	51.0	13.9	37.1
Nebraska	35.1	31.7	3.4	39.7	22.5	17.2
North Dakota	10.9	8.0	2.9	1.3	b	1.3
South Dakota	7.9	7.2	0.7	5.6	1.2	4.4
South Atlantic	**235.1**	**205.5**	**29.6**	**420.3**	**193.9**	**226.4**
Delaware	3.5	3.4	0.1	11.7	7.7	4.0
District of Columbia	16.2	10.8	5.4	0.0	0.0	0.0
Florida	31.0	28.1	2.9	67.5	17.7	49.8
Georgia	53.9	53.8	0.1	125.4	15.4	110.0
Maryland	30.1	21.5	8.6	24.9	17.6	7.3
North Carolina	26.8	26.3	0.5	68.2	63.5	4.7
South Carolina	16.2	12.4	3.8	61.3	25.5	35.8
Virginia	37.6	30.3	7.3	41.6	26.9	14.7
West Virginia	19.8	18.9	0.9	19.7	19.6	0.1
East South Central	**110.0**	**100.8**	**9.2**	**284.3**	**184.8**	**99.5**
Alabama	26.3	22.4	3.9	105.3	62.9	42.4
Kentucky	28.8	26.9	1.9	46.9	27.3	19.6
Mississippi	13.7	13.7	b	52.8	47.4	5.4
Tennessee	41.2	37.8	3.4	79.3	47.2	32.1
West South Central	**227.5**	**223.6**	**3.9**	**783.5**	**496.0**	**287.5**
Arkansas	26.9	26.8	0.1	68.0	53.9	14.1
Louisiana	23.9	23.8	0.1	128.8	117.8	11.0
Oklahoma	41.5	38.9	2.6	130.0	69.9	60.1
Texas	135.2	134.1	1.1	456.7	254.4	202.3
Mountain	**168.9**	**167.7**	**1.2**	**140.6**	**106.8**	**33.8**
Arizona	24.6	24.6	0.0	17.5	17.5	b
Colorado	65.9	65.3	0.6	29.9	6.9	23.0
Idaho	9.5	9.5	0.0	15.4	14.8	0.6
Montana	13.9	13.6	0.3	7.1	0.8	6.3
Nevada	12.9	12.9	0.0	5.9	5.9	0.0
New Mexico	14.3	14.0	0.3	10.5	10.2	0.3
Utah	17.9	17.9	0.0	40.5	40.5	0.0
Wyoming	9.9	9.9	b	13.8	10.2	3.6
Pacific	**273.0**	**251.3**	**21.7**	**437.7**	**49.8**	**387.9**
Alaska	11.3	11.3	0.0	0.0	0.0	0.0
California	206.0	194.6	11.4	335.5	14.6	320.9
Hawaii	0.6	0.3	0.3	1.9	1.9	0.0
Oregon	19.5	19.5	b	35.6	11.0	24.6
Washington	35.6	25.6	10.0	64.7	22.3	42.4

a. Does not include electric generation. See Table 6-13.
b. Less than 0.05 trillion Btu.

TABLE 6-9
GAS UTILITY INDUSTRY SALES
BY TYPE OF INDUSTRY CLASSIFICATION, 1960-1985

(Trillions of Btu)

Industry Classification	1960	1965	1970	1975	1980	1984[R]	1985
Agriculture, forestry and fisheries	10.8	12.0	33.0	49.7	47.1	46.6	46.5
Petroleum and natural gas production	48.3	97.8	101.0	83.8	32.2	49.5	45.6
Other mining	44.8	69.8	59.8	49.3	55.6	27.1	27.7
Electric services[a]	1,420.4	1,734.2	2,588.6	1,685.2	2,520.5	2,160.2	2,327.1
Other transportation, communications, and public utilities	22.4	38.5	96.2	95.9	92.5	97.7	94.3
Hotels, rooming houses, camps	16.2	33.5	67.3	77.8	27.8	32.8	34.3
Laundries, cleaning and dyeing	4.0	16.3	21.5	24.3	22.0	27.9	28.5
Other services	34.2	70.1	175.1	236.7	309.5	382.6	372.5
Other non-manufacturing	43.1	74.9	198.6	187.5	151.8	261.7	288.7
Ordnance	14.1	21.2	35.4	b	b	b	b
Food and kindred products	167.8	243.0	330.5	338.9	320.2	287.8	252.5
Textile products, apparel, fabrics, etc.	22.6	43.7	72.5	54.6	64.3	62.9	57.4
Furniture, lumber, and other wood products	23.1	52.3	64.9	61.1	45.7	44.9	36.7
Paper and allied products	193.2	267.5	402.7	267.6	257.8	202.7	187.6
Carbon black	15.0	42.0	52.8	38.2	34.1	2.8	2.2
Chemicals and allied products (except carbon black)	519.6	644.6	880.7	886.5	603.8	578.7	535.6
Petroleum refining	384.1	375.1	639.6	514.5	372.0	135.6	118.3
Rubber and miscellaneous plastic products	16.8	38.9	47.8	45.1	50.7	56.0	42.2
Glass products	138.4	184.8	208.8	173.7	170.9	130.1	93.7
Cement	169.6	183.5	195.0	158.1	49.2	11.9	8.3
Clay products, pottery, etc.	129.6	153.7	145.3	110.0	86.4	55.6	58.0
Other stone products and miscellaneous	30.8	68.3	82.3	97.0	85.5	67.0	48.9
Primary iron and steel industries	346.1	552.4	669.0	555.5	546.3	336.9	265.9
Primary non-ferrous industries	208.1	270.8	232.9	275.9	194.4	178.8	124.5
Fabricated metal products, machinery equipment and supplies	110.7	181.6	289.8	276.8	233.1	213.7	195.7
Transportation equipment	65.1	112.0	170.8	140.2	84.4	88.8	82.9
Other manufacturing	33.9	63.3	100.0	122.1	121.0	147.3	141.0
Public administration	c	c	c	72.1	70.0	95.0	91.9
Unclassified[d]	1,181.1	1,236.9	1,434.9	3,495.4	4,354.9	3,156.6	2,858.4
Total Gas Utility Industry Commercial, Industrial and "Other" sales[a,e]	**5,413.9**	**6,882.7**	**9,396.8**	**10,173.5**	**11,003.7**	**8,939.2**	**8,466.9**
Total Commercial, Industrial and "Other" sales of co.'s reporting this table	**4,512.7**	**6,050.0**	**8,022.9**	**8,786.0**	**7,851.5**	**6,214.2**	**5,926.7**
Transfers[a]	**234.1**	**246.2**	**283.6**	**301.6**	**416.7**	**405.8**	**364.5**

a. Includes the quantities of gas for electric generation detailed as "Transfers" which are not included in Total Commercial, Industrial, and "Other" sales of companies reporting this table or in Total Gas Utility Industry sales. Such quantities represent transfers by the gas department to the electric department of combination gas and electric companies.
b. Classification eliminated.
c. New classification in 1972.
d. Difference between total and classified volumes.
e. Includes Industrial and "Other" sales only prior to 1971.
R-Revised.
Note: Prior to 1982 only large volume sales detailed by SIC.

TABLE 6-11
GAS CONSUMED FOR ELECTRIC GENERATION,[a] BY STATE, 1960-1985

(Millions of Cubic Feet)

Division and State	1960	1965	1970	1975	1980	1984[R]	1985
United States	**1,724,762**	**2,321,101**	**3,931,860**	**3,146,874**	**3,681,595**	**3,111,342**	**3,030,417**
New England	**12,885**	**13,918**	**8,133**	**2,523**	**7,001**	**38,360**	**49,365**
Connecticut	1,756	337	147	344	0	2,228	1,559
Maine	0	0	0	0	0	0	0
Massachusetts	10,785	13,098	5,668	1,437	5,083	32,132	45,179
New Hampshire	0	0	0	177	0	67	0
Rhode Island	344	483	2,319	11	1,679	3,661	2,532
Vermont	0	0	0	555	239	272	95
Middle Atlantic	**89,288**	**97,850**	**161,385**	**23,436**	**206,769**	**267,559**	**235,571**
New Jersey	25,482	22,440	45,891	8,601	79,513	95,323	61,371
New York	57,819	74,189	106,141	13,613	124,391	169,620	172,631
Pennsylvania	5,987	1,221	9,354	1,213	2,865	2,615	1,570
East North Central	**61,407**	**68,232**	**278,143**	**118,394**	**65,883**	**19,762**	**19,150**
Illinois	42,348	34,618	132,382	34,176	19,165	5,963	5,890
Indiana	8,790	13,272	29,507	10,994	1,904	1,451	1,117
Michigan	5,209	2,989	64,270	47,151	26,368	9,711	10,126
Ohio	2,992	2,947	21,380	6,139	4,706	694	699
Wisconsin	2,068	14,406	30,604	19,935	13,740	1,942	1,317
West North Central	**245,084**	**303,818**	**420,086**	**264,825**	**143,387**	**41,339**	**27,333**
Iowa	48,587	52,238	77,910	46,929	6,835	3,069	2,100
Kansas	82,195	112,955	167,885	127,818	101,022	32,234	21,181
Minnesota	48,521	51,420	58,954	22,709	8,077	1,978	1,275
Missouri	30,251	47,552	62,970	26,320	15,329	2,501	1,466
Nebraska	30,973	36,269	47,641	37,659	11,850	1,495	1,284
North Dakota	103	25	362	157	15	10	2
South Dakota	4,454	3,359	4,364	3,232	259	52	26
South Atlantic	**147,439**	**117,395**	**343,408**	**199,105**	**191,409**	**187,526**	**177,552**
Delaware	3,190	4,611	3,744	1,697	6,999	7,060	7,266
District of Columbia	0	0	0	0	0	0	0
Florida	88,518	87,001	198,367	141,153	166,047	174,740	165,683
Georgia	25,336	831	58,674	40,282	3,666	608	885
Maryland	78	56	11,435	451	5,230	1,294	1,372
North Carolina	4,660	2,895	21,126	101	1,702	121	595
South Carolina	23,278	18,801	45,081	14,566	5,418	435	483
Virginia	1,438	2,268	4,276	496	2,285	3,152	1,146
West Virginia	941	932	705	358	62	116	122
East South Central	**53,249**	**78,626**	**140,940**	**37,774**	**99,461**	**64,805**	**55,779**
Alabama	9,378	5,561	15,444	5,994	1,382	356	1,078
Kentucky	2,288	453	8,533	272	1,902	1,767	1,121
Mississippi	34,358	56,360	99,710	31,507	95,073	62,682	53,579
Tennessee	7,225	16,252	17,253	0	1,104	0	0
West South Central	**656,727**	**1,009,857**	**1,735,541**	**2,042,085**	**2,243,820**	**1,816,190**	**1,695,169**
Arkansas	46,779	67,510	107,445	31,818	58,863	24,962	11,753
Louisiana	119,818	175,573	331,750	356,130	424,991	300,857	285,039
Oklahoma	82,820	127,231	234,721	300,848	329,940	224,987	200,686
Texas	407,310	639,543	1,061,625	1,353,290	1,430,026	1,265,385	1,197,690
Mountain	**134,990**	**136,442**	**198,745**	**164,636**	**175,032**	**71,186**	**83,716**
Arizona	53,246	36,740	58,898	17,693	49,699	25,366	41,731
Colorado	37,015	35,539	51,194	52,930	31,928	4,899	4,913
Idaho	0	0	0	18	46	5	24
Montana	341	1,992	2,529	1,059	4,182	360	468
Nevada	6,339	13,271	25,336	25,152	27,541	9,389	8,080
New Mexico	33,701	43,996	54,894	64,239	56,280	30,810	28,133
Utah	3,677	4,742	3,520	2,725	5,133	271	235
Wyoming	671	163	2,373	819	222	86	132
Pacific	**323,693**	**494,963**	**645,478**	**294,105**	**548,833**	**604,615**	**686,783**
Alaska	0	2,149	8,198	19,619	28,763	31,582	34,194
California	322,992	492,701	636,270	274,483	518,808	573,001	652,511
Hawaii	0	0	0	0	0	0	0
Oregon	701	113	1,010	3	321	0	0
Washington	0	0	0	0	941	32	77

a. Includes direct sales by producers to electric utilities as well as sales by the gas utility industry.
R - Revised.
Source: U.S. Department of Energy, Energy Information Administration, *Electric Power Monthly*, December 1985.

TABLE 6-12
GAS UTILITY INDUSTRY GAS USED FOR ELECTRIC GENERATION, 1960-1985[a]

(Trillions of Btu)

Year	Sales				Transfers[c]	Total Sales and Transfers
	Industrial[b]		Other	Total Sales		
	Firm	Interruptible				
1960		999.3	187.1	1,186.4	234.1	1,420.4
1961		990.6	218.6	1,209.2	244.0	1,453.2
1962		1,040.7	259.0	1,299.7	239.1	1,538.8
1963		1,103.2	306.6	1,409.7	247.1	1,656.8
1964		1,258.3	347.0	1,605.3	265.4	1,870.7
1965		1,179.5	308.5	1,488.0	246.2	1,734.2
1966		1,276.2	367.8	1,644.0	260.2	1,904.2
1967		1,386.9	316.7	1,703.6	254.3	1,957.9
1968		1,489.6	381.3	1,870.9	270.9	2,141.8
1969		1,643.9	360.8	2,004.7	232.6	2,237.3
1970		1,877.5	427.5	2,305.0	283.6	2,588.6
1971	853.6	1,083.6	483.4	2,420.6	595.2	3,015.9
1972	956.5	858.4	553.3	2,368.4	549.5	2,917.9
1973	542.8	871.6	511.4	1,925.8	477.2	2,403.0
1974	497.2	812.5	387.9	1,697.6	419.8	2,117.4
1975	374.5	623.4	385.8	1,383.6	301.6	1,685.2
1976	478.1	889.5	d	1,367.6	250.9	1,618.5
1977	489.1	959.6	d	1,448.7	241.1	1,689.8
1978	544.2	854.0	d	1,398.2	187.9	1,586.1
1979	665.2	980.0	d	1,645.2	335.0	1,980.2
1980	974.0	1,129.8	d	2,103.8	416.7	2,520.5
1981	996.6	1,259.3	d	2,255.9	344.0	2,599.8
1982	775.8	1,157.6	d	1,933.4	367.9	2,301.3
1983	632.2	973.3	d	1,605.5	368.3	1,973.8
1984	670.5	1,079.5	d	1,750.0	405.8	2,155.8
1985	835.4	1,113.3	d	1,948.7	364.5	2,313.2

a. Excludes direct sales by producers to electric utilities.
b. No breakdown available prior to 1971.
c. Represents transfers by the gas department to the electric department of combination gas and electric companies.
d. Other now included with Industrial to conform to the definition of industrial services.

TABLE 6-13
GAS UTILITY INDUSTRY GAS USED FOR ELECTRIC GENERATION, BY STATE, 1985[a]

(Trillions of Btu)

Division of State	Industrial Sales			Transfers[b]	Total Sales and Transfers
	Firm	Interruptible	Total		
United States	**835.4**	**1,113.3**	**1,948.7**	**364.5**	**2,313.2**
New England	**0.2**	**45.5**	**45.7**	**1.6**	**47.3**
Connecticut	0.0	0.0	0.0	1.6	1.6
Maine	0.0	0.0	0.0	0.0	0.0
Massachusetts	0.2	42.7	42.9	0.0	42.9
New Hampshire	0.0	0.0	0.0	0.0	0.0
Rhode Island	0.0	2.8	2.8	0.0	2.8
Vermont	0.0	0.0	0.0	0.0	0.0
Middle Atlantic	**0.7**	**75.6**	**76.3**	**181.1**	**257.4**
New Jersey	0.2	20.3	20.5	39.2	59.7
New York	0.1	55.3	55.4	141.9	197.3
Pennsylvania	0.4	0.0	0.4	0.0	0.4
East North Central	**4.8**	**2.7**	**7.5**	**1.1**	**8.6**
Illinois	3.5	0.9	4.4	0.1	4.5
Indiana	0.2	c	0.2	1.0	1.2
Michigan	0.7	0.4	1.1	0.0	1.1
Ohio	0.2	0.2	0.4	0.0	0.4
Wisconsin	0.2	1.2	1.4	0.0	1.4
West North Central	**1.7**	**12.4**	**14.1**	**1.7**	**15.8**
Iowa	0.4	1.4	1.8	0.3	2.1
Kansas	0.6	7.6	8.2	0.6	8.8
Minnesota	c	1.0	1.0	0.6	1.6
Missouri	c	2.1	2.1	0.2	2.3
Nebraska	0.7	0.3	1.0	c	1.0
North Dakota	0.0	c	c	0.0	c
South Dakota	0.0	c	c	c	c
South Atlantic	**1.6**	**118.3**	**119.9**	**13.0**	**132.9**
Delaware	0.9	0.0	0.9	6.0	6.9
District of Columbia	0.0	0.0	0.0	0.0	0.0
Florida	0.7	117.2	117.9	0.0	117.9
Georgia	0.0	0.8	0.8	0.0	0.8
Maryland	c	0.0	c	1.7	1.7
North Carolina	0.0	c	c	0.0	c
South Carolina	0.0	0.1	0.1	c	0.1
Virginia	0.0	0.0	0.0	5.3	5.3
West Virginia	0.0	0.2	0.2	0.0	0.2
East South Central	**39.5**	**3.8**	**43.3**	**0.3**	**43.6**
Alabama	c	0.1	0.1	0.0	0.1
Kentucky	0.0	0.0	0.0	0.3	0.3
Mississippi	39.5	3.7	43.2	0.0	43.2
Tennessee	0.0	c	c	0.0	c
West South Central	**705.0**	**175.2**	**880.2**	**161.7**	**1,041.9**
Arkansas	6.8	c	6.8	0.0	6.8
Louisiana	50.8	5.3	56.1	29.7	85.8
Oklahoma	11.4	2.8	14.2	75.4	89.6
Texas	636.0	167.1	803.1	56.6	859.7
Mountain	**68.1**	**3.1**	**71.8**	**4.0**	**75.8**
Arizona	44.8	0.1	44.9	c	44.9
Colorado	1.6	3.6	5.2	0.2	5.4
Idaho	0.0	0.0	0.0	0.0	0.0
Montana	0.3	c	0.3	0.2	0.5
Nevada	8.7	0.0	8.7	3.3	12.0
New Mexico	12.2	0.0	12.2	0.0	12.2
Utah	0.4	0.0	0.4	0.0	0.4
Wyoming	0.1	0.0	0.1	0.3	0.4
Pacific	**13.8**	**676.1**	**689.9**	**0.0**	**689.9**
Alaska	0.0	18.5	18.5	0.0	18.5
California	13.8	657.6	671.4	0.0	671.4
Hawaii	0.0	0.0	0.0	0.0	0.0
Oregon	0.0	0.0	0.0	0.0	0.0
Washington	0.0	0.0	c	0.0	c

a. Excludes direct sales by producers to electric utilities.
b. Volumes transferred by the gas department to the electric department of combination gas and electric companies.
c. Less than 0.05 trillion Btu.

TABLE 6-14
TOTAL LIQUEFIED PETROLEUM GAS SALES BY CONSUMING SECTOR
1960-1984[a]

(Trillions of Btu)

Year	Total	Sector			
		Residential	Commercial	Industrial	Transportation
1960	911.7	342.9	60.5	489.1	19.1
1961	938.2	350.5	61.9	506.8	19.0
1962	1,024.7	382.6	67.5	554.3	20.3
1963	1,107.9	410.2	72.4	604.0	21.3
1964	1,183.6	420.6	74.2	663.6	25.3
1965	1,231.8	434.0	76.6	697.0	24.3
1966	1,299.3	461.2	81.4	734.0	22.7
1967	1,322.0	483.3	85.3	732.9	20.5
1968	1,472.8	519.1	91.6	839.9	22.1
1969	1,695.6	589.6	104.1	975.9	26.1
1970	1,688.5	578.9	102.2	981.1	26.4
1971	1,722.9	585.4	103.3	1,003.8	30.3
1972	1,954.6	628.0	110.8	1,179.1	36.7
1973	1,980.7	594.8	105.0	1,242.0	39.0
1974	1,913.8	545.9	96.3	1,230.7	40.9
1975	1,807.1	527.8	93.1	1,148.8	37.4
1976	1,907.3	549.2	96.9	1,223.1	38.0
1977	1,907.9	533.5	94.1	1,243.8	36.5
1978	1,891.9	516.4	91.1	1,255.2	29.2
1979	2,138.1	354.8	62.6	1,707.8	12.9
1980	1,976.0	325.1	57.4	1,576.1	17.4
1981	1,948.9	310.9	54.9	1,561.4	21.7
1982	1,978.4	296.1	52.3	1,601.2	28.9
1983	1,990.2	352.4	62.2	1,538.2	37.4
1984	2,071.2	379.0	66.9	1,576.4	49.0

a. Liquefied petroleum gases include ethane, ethylene, propane, propylene, butane, butylene, butane-propane mixture, ethane-propane mixture, and isobutane. The 1979-1984 LPG data may not be directly comparable to the pre-1979 data due to modifications to the LPG sales survey form and an updated sampling frame.

Source: U.S. Department of Energy, Energy Information Administration, *State Energy Data Reports.*

SECTION 7
REVENUES

	1985	% Change 85/84
Gas Utility Industry		
(Thousands)		
Total Revenues (From sales)	$63,293,162	− 6.2
Residential	26,864,030	− 2.3
Commercial	12,722,274	− 3.7
Industrial	23,086,372	−11.5
Industrial Only	15,658,707	−16.3
Electric Generation	7,427,665	+ 0.5
Other	620,486	−12.9
Resale	$39,772,658	−17.8

TABLE 6-10
GAS UTILITY INDUSTRY SALES, BY TYPE OF INDUSTRY CLASSIFICATION AND BY DIVISION, 1985

(Trillions of Btu)

Industry Classification	Total U.S.	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Agriculture, forestry and fisheries	46.5	0.6	0.6	9.3	8.9	0.2	1.1	10.6	3.1	12.2
Petroleum and natural gas production	45.6	a	0.2	3.7	13.1	0.0	1.9	3.1	1.4	22.2
Other mining	27.7	a	0.2	3.3	4.4	5.6	0.1	6.5	2.7	4.9
Electric services[b]	2,327.1	47.3	257.5	9.2	15.9	132.9	43.7	1,041.9	75.8	702.9
Other transportation, communication, and public utilities	94.3	4.7	6.3	18.3	24.3	1.4	2.2	8.3	2.7	26.1
Hotels, rooming houses, and camps	34.3	1.1	4.0	9.3	3.4	2.0	0.9	0.3	2.7	10.7
Laundries, cleaning and dyeing	28.5	1.0	2.0	9.0	0.6	1.6	1.4	0.3	1.1	11.5
Other services	372.5	10.9	32.1	160.1	35.4	18.0	12.8	10.1	16.0	77.2
Other non-manufacturing	288.7	17.0	32.7	117.9	29.7	6.4	7.0	1.1	9.7	67.2
Food and kindred products	252.5	2.3	21.4	67.6	54.0	21.4	11.1	7.9	3.8	63.2
Textile products, apparel, fabrics, etc.	57.4	2.9	2.8	3.6	0.2	37.6	5.4	0.1	0.1	4.6
Furniture, lumber, and other wood products	36.7	0.1	2.1	6.9	1.3	6.1	3.3	7.0	0.5	9.4
Paper and allied products	187.6	3.6	21.5	45.8	6.8	23.2	27.8	5.3	7.8	45.7
Carbon black	2.2	0.0	0.0	0.3	0.0	0.8	0.3	0.3	0.0	0.4
Chemicals and allied products (except carbon black)	535.6	3.5	26.9	68.2	88.7	82.8	27.1	201.0	2.1	35.3
Petroleum refining	118.3	a	3.8	15.9	4.6	8.4	1.9	8.8	4.7	70.3
Rubber and miscellaneous plastic products	42.2	0.8	4.9	16.8	3.6	5.8	5.4	1.3	0.2	3.5
Glass products	93.7	2.4	23.6	19.2	3.0	13.5	8.7	3.6	0.0	19.6
Cement	8.3	0.0	0.1	0.5	2.2	0.5	1.1	0.5	0.7	2.8
Clay products, pottery, etc.	58.0	0.6	4.2	6.1	5.6	29.0	5.6	1.3	0.7	4.9
Other stone products and miscellaneous	48.9	1.6	6.7	9.3	8.4	5.6	2.7	0.7	1.4	12.6
Primary iron and steel industries	265.9	3.1	37.1	158.1	18.0	9.9	25.8	0.8	3.5	9.6
Primary non-ferrous industries	124.5	1.6	8.7	54.3	8.3	5.0	13.5	7.3	10.6	15.3
Fabricated metal products, machinery equipment and supplies	195.7	6.1	24.5	100.6	15.8	8.2	10.7	4.8	2.2	22.8
Transportation equipment	82.9	2.0	5.1	45.1	9.6	5.5	2.9	2.3	0.3	10.0
Other manufacturing	141.0	2.5	15.0	32.4	8.9	10.8	11.4	44.9	2.0	13.1
Public administration	91.9	1.9	12.4	16.6	11.7	11.8	5.1	7.9	4.8	19.5
Unclassified	2,858.4	82.9	392.2	485.8	297.1	339.9	210.0	704.3	240.0	105.9
Total Gas Utility Industry Commercial, Industrial and "Other" sales[b]	**8,466.9**	**200.5**	**948.6**	**1,493.2**	**683.5**	**793.9**	**450.9**	**2,092.3**	**400.6**	**1,403.4**
Total Commercial, Industrial and "Other" sales of co.'s reporting this table	**5,926.7**	**136.5**	**576.1**	**1,232.7**	**530.5**	**588.6**	**286.2**	**1,042.5**	**235.0**	**1,298.5**
Transfers[b]	**364.5**	**1.6**	**181.1**	**1.1**	**1.7**	**13.0**	**0.3**	**161.7**	**4.0**	**0.0**

a. Less than 0.05 trillion Btu.
b. Includes the quantities for electric generation detailed as "Transfers" which are not included in Total Commercial, Industrial and "Other" sales of companies reporting this table or in Total Gas Utility Industry sales. Such quantities represent transfers by the gas department to the electric department of combination gas and electric companies.

TABLE 7-1
GAS UTILITY INDUSTRY REVENUES, BY CLASS OF SERVICE, 1960-1985[a]

(Thousands)

Year	Total	Residential	Commercial	Industrial[b]	Other[b]
1960	$ 5,617,387	$ 3,177,430	$ 723,448	$ 1,563,285	$153,224
1961	5,992,879	3,376,781	789,202	1,658,276	168,620
1962	6,444,860	3,603,266	874,366	1,795,894	171,334
1963	6,726,815	3,727,868	910,497	1,905,733	182,717
1964	7,132,685	3,894,870	998,386	2,048,527	190,902
1965	7,406,978	4,029,562	1,053,647	2,147,958	175,811
1966	7,869,888	4,195,331	1,135,352	2,334,654	204,551
1967	8,260,739	4,382,837	1,223,897	2,460,885	193,120
1968	8,781,152	4,567,307	1,315,409	2,675,261	223,175
1969	9,479,566	4,883,029	1,459,054	2,918,973	218,510
1970	10,282,611	5,207,335	1,620,446	3,181,206	273,624
1971	11,357,392	5,635,395	1,829,309	3,568,582	324,106
1972	12,465,235	6,094,171	2,063,803	3,943,011	364,250
1973	12,987,272	6,246,988	2,172,460	4,196,714	371,110
1974	15,242,481	6,899,395	2,539,300	5,391,139	412,647
1975	19,101,498	8,445,484	3,302,669	6,745,171	608,174
1976	23,701,211	9,941,013	4,075,009	9,434,751	250,438
1977	28,303,200	11,540,805	4,979,890	11,454,675	327,830
1978	32,149,921	12,938,865	5,695,666	13,138,576	376,814
1979	38,947,143	14,832,950	6,623,766	17,044,820	445,607
1980	48,303,034	17,432,095	8,183,160	22,215,221	472,558
1981	56,109,786	19,180,238	9,285,550	27,123,862	520,136
1982	63,199,775	23,699,899	11,666,099	27,200,015	633,762
1983	65,836,669	26,173,122	12,658,718	26,314,873	689,956
1984[R]	67,496,298	27,484,877	13,205,106	26,093,776	712,539
1985	63,293,162	26,864,030	12,722,274	23,086,372	620,486

a. Excludes data for Alaska prior to 1961.
b. Prior to 1976 "Other" electric generation (refer to Table 7-10) is included in the "Other" class of service. For 1976 and beyond all electric generation is included in the Industrial category.
R-Revised.

TABLE 7-2
GAS UTILITY INDUSTRY REVENUES, BY QUARTER AND CLASS OF SERVICE
1960-1985

(Thousands)

Year and Quarter	Total	Residential	Commercial	Industrial[a]	Other[a]
1960					
First	$ 2,033,980	$ 1,304,810	$ 297,337	$ 385,053	$ 46,780
Second	1,278,858	701,603	153,028	389,985	34,242
Third	860,134	358,237	83,575	388,519	29,803
Fourth	1,431,263	803,400	186,039	399,440	42,384
1965					
First	2,688,389	1,667,580	438,864	528,598	53,347
Second	1,713,833	909,991	230,269	535,235	38,338
Third	1,151,283	461,313	121,320	531,538	37,112
Fourth	1,847,096	986,096	261,769	552,222	47,009
1970					
First	3,742,316	2,197,999	687,117	780,927	76,273
Second	2,342,672	1,136,333	346,748	797,906	61,685
Third	1,624,621	578,747	182,163	803,503	60,208
Fourth	2,573,002	1,294,256	404,418	798,870	75,458
1975					
First	6,192,706	3,303,345	1,241,301	1,507,088	140,972
Second	4,449,583	1,972,484	734,977	1,625,673	116,449
Third	3,396,905	987,079	438,873	1,783,838	187,115
Fourth	5,062,304	2,182,576	887,518	1,828,572	163,638
1978					
First	11,443,834	5,794,334	2,412,856	3,106,186	130,458
Second	6,946,269	2,533,334	1,125,102	3,213,436	74,397
Third	5,548,952	1,309,307	690,271	3,477,345	72,029
Fourth	8,210,868	3,301,893	1,467,438	3,341,609	99,930
1979					
First	13,317,971	6,544,017	2,744,291	3,860,146	169,518
Second	8,158,475	2,823,066	1,259,409	4,003,476	72,524
Third	6,809,065	1,517,166	796,336	4,427,445	68,117
Fourth	10,661,631	3,948,701	1,823,730	4,753,753	135,448
1980					
First	16,402,661	7,290,269	3,245,916	5,690,750	175,726
Second	10,062,858	3,365,770	1,567,485	5,041,319	88,284
Third	8,570,836	1,776,745	1,036,752	5,685,694	71,645
Fourth	13,266,679	4,999,311	2,333,007	5,797,458	136,903
1981					
First	18,801,514	8,306,948	3,745,526	6,558,879	190,161
Second	12,100,242	3,431,510	1,700,873	6,864,699	103,160
Third	10,093,853	1,953,491	1,174,408	6,886,411	79,543
Fourth	15,114,177	5,488,289	2,664,743	6,813,873	147,272
1982					
First	22,716,502	10,471,317	4,812,798	7,199,859	232,528
Second	13,208,177	4,427,895	2,205,520	6,459,704	115,058
Third	10,788,316	2,372,937	1,455,682	6,868,834	90,863
Fourth	16,486,780	6,427,750	3,192,099	6,671,618	195,313
1983					
First	23,039,000	10,804,224	5,020,783	6,950,292	263,701
Second	14,587,145	5,598,036	2,665,010	6,176,141	147,958
Third	10,920,330	2,597,847	1,544,337	6,682,247	95,899
Fourth	17,290,194	7,173,015	3,428,588	6,506,193	182,398
1984[R]					
First	25,546,562	12,465,689	5,734,074	7,050,372	296,427
Second	14,279,409	5,321,699	2,579,755	6,245,386	132,569
Third	10,848,608	2,687,920	1,553,057	6,523,808	83,823
Fourth	16,821,719	7,009,569	3,338,220	6,274,210	199,720
1985					
First	24,902,146	12,459,168	5,657,411	6,517,190	268,377
Second	12,186,583	4,597,362	2,221,176	5,255,781	112,264
Third	9,791,038	2,658,152	1,468,258	5,591,742	72,886
Fourth	16,413,395	7,149,348	3,375,429	5,721,659	166,959

a. Prior to 1976 "Other" electric generation (see Table 7-9) is included in the "Other" class of service. For 1976 and beyond all electric generation is included in the Industrial category.
R–Revised.

TABLE 7-3
GAS UTILITY INDUSTRY REVENUES, BY STATE
1960-1985[a]

(Thousands)

Division and State	1960	1965	1970	1975	1980	1984[R]	1985
United States	**$5,617,387**	**$7,406,978**	**$10,282,611**	**$19,101,498**	**$48,303,034**	**$67,496,298**	**$63,293,162**
New England	**212,719**	**274,937**	**377,666**	**700,071**	**1,479,111**	**2,295,169**	**2,289,149**
Connecticut	52,198	66,653	98,178	178,480	366,348	575,806	572,431
Maine	3,608	3,845	4,013	5,983	11,155	20,186	19,318
Massachusetts	131,588	171,040	228,224	425,411	905,414	1,392,741	1,388,928
New Hampshire	5,126	7,336	10,328	17,190	40,569	71,536	71,173
Rhode Island	18,803	24,599	34,360	65,982	132,190	205,553	207,349
Vermont	1,396	1,464	2,563	7,025	23,435	29,347	29,950
Middle Atlantic	**1,068,271**	**1,342,428**	**1,753,799**	**2,940,846**	**6,603,468**	**10,119,249**	**9,466,303**
New Jersey	192,315	268,622	372,672	594,560	1,408,766	2,181,418	2,144,776
New York	462,574	570,984	720,609	1,248,149	2,663,655	4,441,004	4,198,569
Pennsylvania	413,382	502,822	660,518	1,098,137	2,531,047	3,496,827	3,122,958
East North Central	**1,394,218**	**1,995,933**	**2,888,886**	**5,033,327**	**11,584,314**	**16,228,356**	**15,234,866**
Illinois	393,707	555,763	829,369	1,504,405	3,588,071	4,841,699	4,546,146
Indiana	135,593	218,436	356,270	530,454	1,341,428	2,123,383	1,881,958
Michigan	290,178	434,292	651,318	1,269,106	2,602,792	3,776,960	3,779,438
Ohio	483,987	625,011	789,008	1,254,154	2,875,396	3,854,328	3,413,729
Wisconsin	90,753	162,431	262,921	475,208	1,176,627	1,631,986	1,633,595
West North Central	**540,961**	**701,789**	**982,976**	**1,585,864**	**3,778,158**	**5,725,532**	**5,272,430**
Iowa	96,062	127,197	180,607	311,364	718,370	1,062,887	998,934
Kansas	100,563	125,238	178,128	282,119	815,547	1,081,451	937,324
Minnesota	113,648	156,680	218,398	352,170	750,995	1,311,037	1,277,197
Missouri	144,596	187,021	267,726	406,752	992,492	1,422,570	1,277,040
Nebraska	66,334	77,722	101,542	169,010	356,352	582,837	536,737
North Dakota	5,712	10,566	15,540	31,037	77,168	131,167	119,167
South Dakota	14,046	17,365	21,035	33,412	67,234	133,583	126,031
South Atlantic	**476,032**	**631,577**	**941,975**	**1,538,752**	**4,112,603**	**6,452,307**	**5,787,396**
Delaware	10,102	15,881	22,672	33,229	78,336	146,287	124,740
District of Columbia	26,868	29,602	34,635	54,671	120,837	235,569	205,515
Florida	47,537	73,357	120,609	146,526	611,114	953,086	910,783
Georgia	104,603	127,728	191,637	349,550	950,915	1,543,220	1,436,103
Maryland	87,037	113,321	163,999	272,830	598,324	933,782	780,472
North Carolina	30,669	54,773	106,051	165,659	495,459	771,991	670,080
South Carolina	23,344	42,736	74,858	130,662	354,351	548,288	480,164
Virginia	67,569	89,235	126,840	206,109	482,080	820,714	736,868
West Virginia	78,303	84,944	100,674	179,516	421,187	499,370	442,671
East South Central	**312,695**	**365,717**	**509,350**	**775,705**	**2,306,091**	**3,210,887**	**2,847,348**
Alabama	93,652	113,647	149,962	237,710	698,762	939,174	860,907
Kentucky	80,075	91,310	127,787	199,738	509,455	765,769	694,725
Mississippi	60,254	68,331	100,383	134,730	517,786	646,893	554,980
Tennessee	78,714	92,429	131,218	203,527	580,088	859,051	736,736
West South Central	**642,063**	**771,223**	**1,066,433**	**2,953,148**	**8,951,915**	**10,335,091**	**9,062,862**
Arkansas	58,303	83,252	125,928	175,862	408,334	690,394	559,821
Louisiana	141,741	165,926	219,303	386,609	1,215,482	1,263,144	1,118,878
Oklahoma	88,272	103,263	127,367	328,817	965,728	1,185,651	982,583
Texas	353,747	418,782	593,835	2,061,860	6,362,371	7,195,902	6,401,580
Mountain	**246,824**	**325,757**	**456,593**	**920,668**	**2,393,490**	**3,256,561**	**3,050,419**
Arizona	52,255	65,722	95,423	171,773	384,777	536,957	573,729
Colorado	69,462	88,404	120,563	241,901	713,628	1,008,487	907,835
Idaho	11,555	19,776	28,990	75,818	182,600	169,766	171,432
Montana	22,159	32,003	42,871	82,021	163,917	210,612	204,292
Nevada	8,786	17,544	32,383	79,858	196,982	229,611	226,256
New Mexico	38,804	43,638	56,975	125,617	333,855	400,494	351,053
Utah	32,269	43,572	55,273	101,164	284,725	507,446	453,012
Wyoming	11,534	15,098	24,115	42,516	133,006	193,188	162,810
Pacific	**723,604**	**997,617**	**1,304,933**	**2,653,117**	**7,093,884**	**9,873,146**	**10,262,389**
Alaska	b	4,575	11,678	24,829	38,725	77,368	95,581
California	653,350	875,876	1,117,573	2,193,048	6,076,193	8,594,679	8,969,857
Hawaii	5,003	6,053	7,714	24,125	45,162	44,950	44,305
Oregon	24,806	42,169	65,096	156,703	354,502	443,088	432,989
Washington	40,445	68,944	102,872	254,412	579,302	713,061	719,657

a. Excludes revenues from sales for resale.
b. Not available.
R-Revised.

TABLE 7-4
GAS UTILITY INDUSTRY REVENUES FROM GAS FOR RESALE, BY STATE, 1960-1985[a]

(Thousands)

Division and State	1960	1965	1970	1975	1980	1984	1985
United States	**$3,165,820**	**$4,255,066**	**$6,217,662**	**$11,573,752**	**$37,910,013**	**$48,383,065**	**$39,772,658**
New England	**82,195**	**110,807**	**168,196**	**382,550**	**851,449**	**1,297,647**	**1,196,319**
Connecticut			51,891	125,226	222,022	316,426	276,241
Maine			0	0	0	0	0
Massachusetts			94,590	216,069	529,965	831,223	770,323
New Hampshire			5,319	5,744	17,577	31,122	33,292
Rhode Island			16,396	34,645	81,885	118,876	116,463
Vermont			0	866	0	0	0
Middle Atlantic	**575,739**	**777,878**	**1,057,060**	**1,761,307**	**5,815,523**	**8,262,530**	**6,604,685**
New Jersey			215,211	365,302	1,250,773	2,016,712	1,500,354
New York			371,895	532,961	1,829,091	2,786,000	2,273,815
Pennsylvania			469,951	863,044	2,735,659	3,459,818	2,830,516
East North Central	**699,808**	**1,151,990**	**1,940,570**	**3,596,246**	**10,687,835**	**13,535,676**	**11,510,873**
Illinois			529,299	1,041,633	3,412,478	4,611,693	4,020,673
Indiana			188,301	292,665	988,871	1,651,064	1,310,034
Michigan			278,232	659,019	1,804,423	1,997,256	1,471,009
Ohio			756,382	1,144,706	3,145,106	3,793,149	3,199,641
Wisconsin			188,355	458,223	1,336,957	1,482,514	1,509,516
West North Central	**251,580**	**306,416**	**439,274**	**803,046**	**2,198,971**	**3,436,614**	**3,285,293**
Iowa			105,106	202,852	517,052	654,887	613,404
Kansas			52,935	89,538	265,146	417,228	380,686
Minnesota			100,758	178,677	554,425	896,689	885,481
Missouri			127,783	231,990	628,970	1,082,985	941,573
Nebraska			42,394	77,384	174,217	298,779	292,336
North Dakota			2,186	7,695	22,277	10,830	72,384
South Dakota			8,114	14,910	36,884	75,216	99,429
South Atlantic	**487,720**	**597,386**	**748,392**	**1,094,146**	**3,581,501**	**4,665,476**	**3,882,772**
Delaware			680	1,170	2,894	5,973	8,041
District of Columbia			0	0	0	0	0
Florida			24,297	54,786	218,749	311,707	304,365
Georgia			122,268	217,592	709,353	1,199,273	1,091,463
Maryland			81,983	159,003	480,609	514,608	484,449
North Carolina			38,167	96,134	440,145	638,379	520,029
South Carolina			75,078	86,854	313,732	404,723	344,559
Virginia			99,200	177,878	542,737	747,598	722,299
West Virginia			306,719	300,729	873,282	843,215	407,567
East South Central	**343,356**	**348,642**	**495,572**	**752,002**	**2,695,523**	**3,816,255**	**2,882,411**
Alabama			79,205	140,282	495,051	695,291	670,921
Kentucky			156,277	169,609	528,686	760,457	609,693
Mississippi			92,771	163,268	632,103	852,425	490,749
Tennessee			167,320	278,843	1,039,683	1,508,082	1,111,048
West South Central	**238,630**	**236,059**	**324,987**	**765,273**	**4,322,831**	**4,026,212**	**2,836,863**
Arkansas			6,684	9,328	34,680	41,366	37,353
Louisiana			192,241	354,067	1,383,886	1,478,954	966,312
Oklahoma			33,698	91,809	422,361	385,816	190,649
Texas			92,363	310,069	2,481,904	2,120,076	1,642,549
Mountain	**378,843**	**437,321**	**622,947**	**1,349,007**	**4,434,173**	**5,736,987**	**5,270,940**
Arizona			482,102	935,305	3,093,184	4,381,522	3,685,562
Colorado			65,331	163,200	657,917	804,351	706,735
Idaho			24,852	96,221	228,724	208,521	184,861
Montana			3,435	7,289	25,957	21,637	72,458
Nevada			2,950	12,147	36,042	50,535	51,030
New Mexico			20,924	34,447	111,849	70,056	112,829
Utah			4,186	3,113	15,333	13,228	277,426
Wyoming			19,168	97,285	265,167	187,137	180,039
Pacific	**110,949**	**288,567**	**420,664**	**1,070,175**	**3,322,207**	**3,605,668**	**2,302,502**
Alaska			0	0	22,677	0	0
California			249,666	294,546	1,199,764	1,784,204	572,465
Hawaii			0	0	0	0	0
Oregon			120,229	598,295	1,665,022	1,319,802	1,264,807
Washington			50,769	177,334	434,744	501,662	465,230

a. Includes natural gas only prior to 1970 and state breakdowns not available prior to 1970.

TABLE 7-5
GAS UTILITY INDUSTRY REVENUES, BY STATE AND CLASS OF SERVICE, 1985

(Thousands)

Division and State	Total	Class of Service				
		Residential	Commercial	Industrial	Electric Generation	Other
United States	**$63,293,162**	**$26,864,030**	**$12,722,274**	**$15,658,707**	**$7,427,665**	**$620,486**
New England	**2,289,149**	**1,181,464**	**599,983**	**330,717**	**161,786**	**15,199**
Connecticut	572,431	300,336	165,611	104,927	0	557
Maine	19,318	4,761	9,113	5,444	0	0
Massachusetts	1,388,928	712,535	351,430	160,516	151,644	12,803
New Hampshire	71,173	34,420	27,948	7,907	0	898
Rhode Island	207,349	118,689	38,326	39,889	10,142	303
Vermont	29,950	10,723	6,555	12,034	0	638
Middle Atlantic	**9,466,303**	**5,250,537**	**1,979,817**	**1,733,301**	**298,685**	**203,963**
New Jersey	2,144,776	1,126,070	551,810	383,018	83,011	867
New York	4,198,569	2,488,731	752,802	589,777	213,586	153,673
Pennsylvania	3,122,958	1,635,736	675,205	760,506	2,088	49,423
East North Central	**15,254,866**	**8,063,564**	**3,342,685**	**3,766,470**	**36,798**	**45,349**
Illinois	4,546,146	2,439,018	1,039,144	1,043,936	22,780	1,268
Indiana	1,881,958	805,844	339,855	727,986	829	7,444
Michigan	3,779,438	2,085,032	887,916	799,555	5,593	1,342
Ohio	3,413,729	1,981,685	764,715	630,927	2,025	34,377
Wisconsin	1,633,595	751,985	311,055	564,066	5,571	918
West North Central	**5,272,430**	**2,420,616**	**1,310,146**	**1,471,778**	**44,803**	**25,087**
Iowa	998,934	421,312	228,875	340,721	6,740	1,286
Kansas	937,324	320,731	165,411	416,051	23,602	11,529
Minnesota	1,277,197	612,487	307,379	348,874	4,064	4,393
Missouri	1,277,040	706,671	363,576	193,364	6,852	6,577
Nebraska	536,737	237,865	150,193	144,066	3,459	1,154
North Dakota	119,167	57,858	55,359	5,901	42	7
South Dakota	126,031	63,692	39,353	22,801	44	141
South Atlantic	**5,787,396**	**2,107,792**	**1,366,784**	**1,885,708**	**399,180**	**27,932**
Delaware	124,740	43,854	21,847	55,520	3,374	145
District of Columbia	205,515	93,884	111,631	0	0	0
Florida	910,783	100,384	158,701	250,216	390,910	10,572
Georgia	1,436,103	579,721	298,758	552,217	3,464	1,943
Maryland	780,472	452,453	190,313	137,232	241	233
North Carolina	670,080	192,773	152,622	324,150	102	433
South Carolina	480,164	108,598	90,154	279,245	410	1,757
Virginia	736,868	305,128	231,673	187,627	0	12,440
West Virginia	442,671	230,997	111,085	99,501	679	409
East South Central	**2,847,348**	**956,528**	**552,888**	**1,160,051**	**121,843**	**56,038**
Alabama	860,907	292,022	138,680	426,472	362	3,371
Kentucky	694,725	320,598	146,103	203,998	0	24,026
Mississippi	554,980	142,450	68,367	202,727	121,426	20,010
Tennessee	736,736	201,458	199,738	326,854	55	8,631
West South Central	**9,062,862**	**2,088,932**	**1,065,113**	**2,677,470**	**3,066,223**	**165,124**
Arkansas	559,821	177,805	109,533	246,952	24,696	835
Louisiana	1,118,878	336,059	125,338	400,249	200,263	56,969
Oklahoma	982,583	345,419	177,254	420,201	38,896	813
Texas	6,401,580	1,229,649	652,988	1,610,068	2,802,368	106,507
Mountain	**3,050,419**	**1,369,328**	**822,327**	**531,754**	**260,290**	**66,720**
Arizona	573,729	199,541	128,123	74,205	160,988	10,872
Colorado	907,835	460,294	304,027	122,555	19,008	1,951
Idaho	171,432	53,475	51,203	66,754	0	0
Montana	204,292	93,508	66,405	34,960	232	9,187
Nevada	226,256	88,683	73,516	25,233	36,546	2,278
New Mexico	351,053	158,275	68,733	40,612	41,543	41,890
Utah	453,012	246,071	82,784	122,641	1,339	177
Wyoming	162,810	69,481	47,536	44,794	634	365
Pacific	**10,262,389**	**3,425,269**	**1,682,531**	**2,101,458**	**3,038,057**	**15,074**
Alaska	95,581	36,284	27,981	0	31,316	0
California	8,969,857	3,016,973	1,322,985	1,609,962	3,006,713	13,224
Hawaii	44,305	10,459	7,478	26,368	0	0
Oregon	432,989	148,789	118,924	165,276	0	0
Washington	719,657	212,764	205,163	299,852	28	1,850

TABLE 7-6
GAS UTILITY INDUSTRY FIRM AND INTERRUPTIBLE GAS REVENUES, BY STATE, 1985

(Thousands)

Division and State	Commercial			Industrial[a]		
	Total	Firm	Interruptible	Total	Firm	Interruptible
United States	**$12,722,274**	**$12,024,844**	**$697,430**	**$15,658,707**	**$8,928,268**	**$6,730,439**
New England	**599,983**	**549,896**	**50,087**	**330,717**	**178,903**	**151,814**
Connecticut	166,611	129,683	36,928	104,927	63,154	41,773
Maine	9,113	9,113	0	5,444	3,885	1,559
Massachusetts	351,430	338,271	13,159	160,516	92,031	68,485
New Hampshire	27,948	27,948	0	7,907	3,632	4,275
Rhode Island	38,326	38,326	0	39,889	15,449	24,440
Vermont	6,555	6,555	0	12,034	752	11,282
Middle Atlantic	**1,979,817**	**1,881,166**	**98,651**	**1,733,301**	**1,161,181**	**572,120**
New Jersey	551,810	513,801	38,009	383,018	194,709	188,309
New York	752,802	726,934	25,868	589,777	377,944	211,833
Pennsylvania	675,205	640,431	34,774	760,506	588,528	171,978
East North Central	**3,342,685**	**3,263,917**	**78,768**	**3,766,470**	**2,915,958**	**850,512**
Illinois	1,039,144	1,032,223	6,921	1,043,936	836,213	207,723
Indiana	339,855	317,746	22,109	727,986	618,628	109,358
Michigan	887,916	881,231	6,685	799,555	618,287	181,268
Ohio	764,715	758,922	5,793	630,927	575,520	55,407
Wisconsin	311,055	273,795	37,260	564,066	267,310	296,756
West North Central	**1,310,146**	**1,182,073**	**128,073**	**1,471,778**	**623,021**	**848,757**
Iowa	228,875	195,809	33,066	340,721	226,979	113,742
Kansas	165,411	158,319	7,092	416,051	128,708	287,343
Minnesota	307,379	272,044	35,335	348,874	115,240	233,634
Missouri	363,576	341,392	22,184	193,364	68,394	124,970
Nebraska	150,193	136,703	13,490	144,066	77,940	66,126
North Dakota	55,359	41,538	13,821	5,901	73	5,828
South Dakota	39,353	36,268	3,085	22,801	5,687	17,114
South Atlantic	**1,366,784**	**1,210,401**	**156,383**	**1,885,708**	**933,125**	**952,583**
Delaware	21,847	21,194	653	55,520	37,372	18,148
District of Columbia	111,631	80,922	30,709	0	0	0
Florida	158,701	145,255	13,446	250,216	60,325	189,891
Georgia	298,758	298,139	619	552,217	80,708	471,509
Maryland	190,313	143,328	46,985	137,232	102,231	35,001
North Carolina	152,622	150,065	2,557	324,150	301,209	22,941
South Carolina	90,154	73,014	17,140	279,245	123,350	155,895
Virginia	231,673	191,610	40,063	187,627	128,882	58,745
West Virginia	111,085	106,874	4,211	99,501	99,048	453
East South Central	**552,888**	**515,142**	**37,746**	**1,160,051**	**750,835**	**409,216**
Alabama	138,680	120,182	18,498	426,472	243,903	182,569
Kentucky	146,103	137,426	8,677	203,998	120,590	83,408
Mississippi	68,367	68,361	6	202,727	182,668	20,059
Tennessee	199,738	189,173	10,565	326,854	203,674	123,180
West South Central	**1,065,113**	**1,053,286**	**11,827**	**2,677,470**	**1,684,469**	**993,001**
Arkansas	109,533	109,079	454	246,952	194,054	52,898
Louisiana	125,338	124,915	423	400,249	357,774	42,475
Oklahoma	177,254	169,135	8,119	420,201	244,064	176,137
Texas	652,988	650,157	2,831	1,610,068	888,577	721,491
Mountain	**822,327**	**816,915**	**5,412**	**531,754**	**394,019**	**137,735**
Arizona	128,123	128,123	0	74,205	73,981	224
Colorado	304,027	301,740	2,287	122,555	33,004	89,551
Idaho	51,203	51,203	0	66,754	64,261	2,493
Montana	66,405	64,783	1,622	34,960	4,603	30,357
Nevada	73,516	73,516	0	25,233	25,233	0
New Mexico	68,733	67,407	1,326	40,612	39,742	870
Utah	82,784	82,784	0	122,641	122,641	0
Wyoming	47,536	47,359	177	44,794	30,554	14,240
Pacific	**1,682,531**	**1,552,048**	**130,483**	**2,101,458**	**286,757**	**1,814,701**
Alaska	27,981	27,981	0	0	0	0
California	1,322,985	1,248,460	74,525	1,609,962	90,175	1,519,787
Hawaii	7,478	5,835	1,643	26,368	26,368	0
Oregon	118,924	118,728	196	165,276	59,473	105,803
Washington	205,163	151,044	54,119	299,852	110,741	189,111

a. Does not include electric generation.

TABLE 7-7
REVENUES FROM GAS UTILITY INDUSTRY SALES, BY TYPE OF INDUSTRY CLASSIFICATION, 1960–1985

(Thousands)

Industry Classification	1960	1965	1970	1975	1980	1984[R]	1985
Agriculture, forestry and fisheries	$ 3,447	$ 4,553	$ 13,373	$ 41,816	$ 137,952	$ 211,220	$ 208,390
Petroleum and natural gas production	13,023	23,092	29,116	67,556	90,824	272,825	229,276
Other mining	10,738	18,697	18,744	44,664	214,732	117,679	111,223
Electric services[a]	366,946	461,037	750,879	1,482,516	6,750,928	8,891,804	8,693,019
Other transportation, communication, and public utilities	6,212	12,867	36,820	99,971	276,149	434,374	408,828
Hotels, rooming houses, and camps	5,225	12,317	34,089	85,216	97,974	192,560	193,306
Laundries, cleaning and dyeing	1,495	7,969	12,508	30,095	76,146	164,480	164,781
Other services	11,615	25,434	82,737	274,992	1,025,544	1,975,265	1,892,707
Other non-manufacturing	13,826	32,472	105,186	228,982	571,193	1,480,279	1,624,996
Ordnance	5,362	5,938	14,216	b	b	b	b
Food and kindred products	57,331	88,419	140,016	352,172	991,498	1,343,174	1,135,245
Textile products, apparel, fabrics, etc.	7,459	16,613	32,563	58,468	191,077	314,526	270,267
Furniture, lumber, and other wood products	7,452	18,713	25,097	65,210	166,086	205,876	163,813
Paper and allied products	54,020	80,392	137,086	258,795	760,852	894,562	791,030
Carbon black	2,435	9,198	12,613	26,646	65,844	12,989	9,976
Chemicals and allied products (except carbon black)	154,556	208,820	303,261	821,397	2,158,091	2,374,888	2,051,301
Petroleum refining	87,605	88,023	167,312	502,402	1,333,883	631,828	488,352
Rubber and miscellaneous plastic products	5,454	12,314	20,483	47,694	164,015	241,412	197,481
Glass products	59,693	73,844	92,362	183,233	524,302	605,678	429,443
Cement	47,540	52,129	81,001	130,210	135,038	56,142	35,363
Clay products, pottery, etc.	49,764	60,873	63,707	111,670	250,795	254,647	254,079
Other stone products and miscellaneous	11,335	26,502	61,841	103,389	277,604	317,321	223,292
Primary iron and steel industries	149,646	232,470	313,595	568,959	1,533,627	1,512,511	1,123,360
Primary non-ferrous industries	58,181	88,218	89,949	268,145	768,053	803,528	562,798
Fabricated metal products, machinery equipment and supplies	55,360	93,760	162,290	319,800	729,513	1,058,405	957,537
Transportation equipment	30,767	53,093	92,514	194,678	286,168	444,571	404,121
Other manufacturing	13,053	23,883	45,777	129,238	377,918	668,862	613,265
Public Administration	c	c	c	74,956	227,343	465,484	450,563
Unclassified[d]	500,856	565,048	608,138	4,377,080	11,861,154	15,546,092	13,951,654
Total Gas Utility Industry Commercial, Industrial and "Other" revenues[a,e]	**$ 1,790,396**	**$ 2,396,688**	**$ 3,547,273**	**$10,949,950**	**$32,044,303**	**$41,492,982**	**$37,639,466**
Total Commercial, Industrial and "Other" revenues of co.'s reporting this table	**$1,514,995**	**$2,123,185**	**$3,028,083**	**$ 9,473,153**	**$23,675,795**	**$29,795,972**	**$26,851,517**
Transfers[a]	**$ 73,887**	**$ 72,919**	**$ 92,443**	**$ 293,936**	**$ 1,173,364**	**$ 1,481,561**	**$ 1,210,334**

a. Includes "revenues" detailed as transfers of gas for electric generation which are not included in Total Commercial, Industrial and "Other" revenues of companies reporting this table or in Total Gas Utility Industry revenues. Such "revenues" represent credits by the electric department to the gas department of combination gas and electric companies.
b. Classification eliminated.
c. New classification in 1972.
d. Difference between total and classified revenues.
e. Includes Industrial and "Other" sales only prior to 1971.
R–Revised.
Note: Prior to 1982 only large volume sales detailed by SIC.

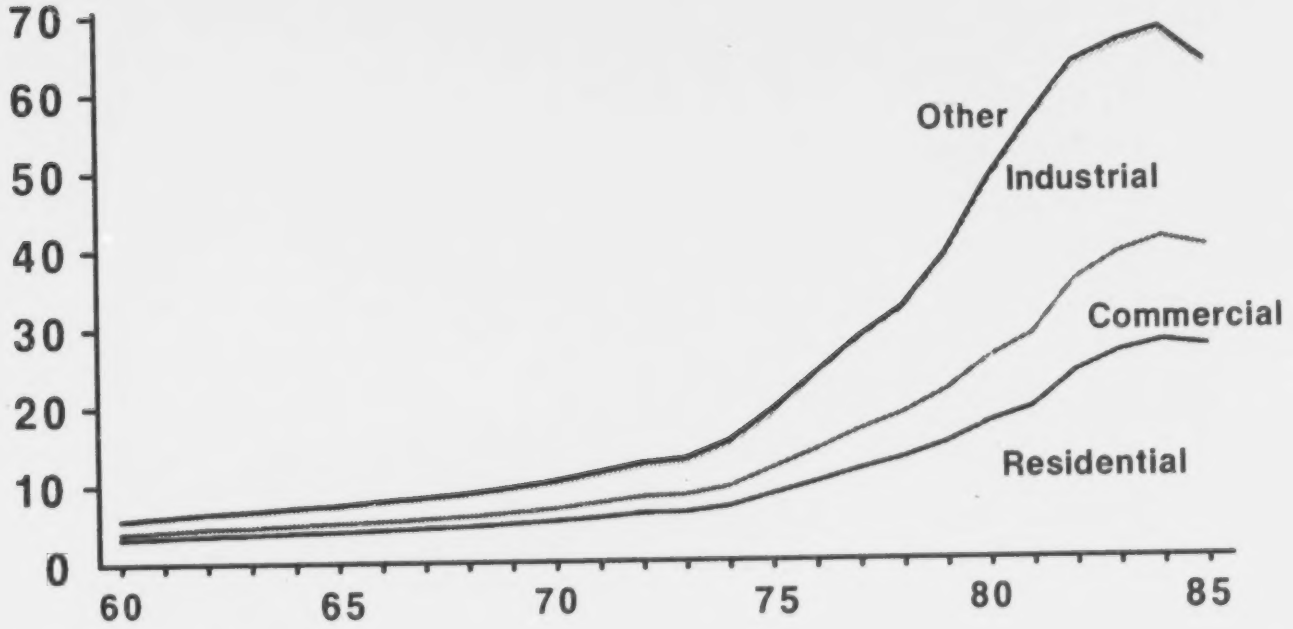
TABLE 7-9
GAS UTILITY INDUSTRY REVENUES FROM GAS USED FOR ELECTRIC GENERATION, 1960-1985[a]

(Thousands)

Year	Revenue				Credits[c]	Total Revenue and Credits
	Industrial[b]					
	Firm	Interruptible	Other	Total Revenue		
1960		$228,474	$ 64,585	$ 293,059	$ 73,887	$ 366,946
1961		247,811	75,437	323,248	74,988	398,236
1962		264,637	86,810	351,447	75,747	427,194
1963		282,932	96,808	379,740	73,517	453,257
1964		304,974	107,193	412,167	77,919	490,086
1965		293,999	94,119	388,118	72,919	461,037
1966		325,605	114,051	439,656	73,073	512,729
1967		346,912	96,643	443,555	75,298	518,853
1968		380,995	117,159	498,154	80,816	578,970
1969		426,325	112,454	538,779	71,747	610,526
1970		520,882	137,553	658,435	92,443	750,878
1971	$ 237,111	$ 335,539	160,035	732,685	201,213	933,898
1972	277,344	294,885	201,865	774,094	193,655	967,749
1973	185,106	309,653	214,419	709,178	197,418	906,596
1974	271,516	395,889	225,124	892,529	269,148	1,161,677
1975	352,660	473,951	361,969	1,188,580	293,936	1,482,516
1976	594,784	1,075,885	d	1,670,669	315,935	1,986,604
1977	779,919	1,535,133	d	2,315,052	379,274	2,694,326
1978	953,406	1,452,434	d	2,405,840	330,572	2,736,412
1979	1,424,871	2,063,626	d	3,488,497	721,948	4,210,445
1980	2,417,592	3,159,972	d	5,577,564	1,173,364	6,750,928
1981	3,037,233	4,273,885	d	7,311,118	1,213,728	8,524,846
1982	3,075,361	4,832,346	d	7,907,707	1,321,944	9,229,651
1983	2,486,220	4,253,117	d	6,739,337	1,351,422	8,090,759
1984[R]	2,536,993	4,852,280	d	7,389,273	1,481,561	8,870,834
1985	2,857,907	4,569,758	d	7,427,665	1,210,334	8,637,999

a. Excludes revenues from direct sales by producers to straight electric utilities.
b. No breakdown available prior to 1971.
c. Represents "Revenues" from transfers of gas for electric generation. Such "Revenues" are credits by the electric department to the gas department of combination gas and electric companies.
d. Other now included with Industrial to conform to the definition of industrial services.
R - Revised.

GAS UTILITY INDUSTRY REVENUES BY CLASS OF SERVICE (BILLIONS OF DOLLARS)



REFERENCE: TABLE 7-1

TABLE 7-8
GAS UTILITY INDUSTRY REVENUES BY TYPE OF INDUSTRY CLASSIFICATION AND BY DIVISION, 1985

(Thousands)

Industry Classification	Total U.S.	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Agriculture, forestry and fisheries	$ 208,390	$ 2,967	$ 3,645	$ 38,177	$ 31,162	$ 861	$ 4,962	$ 35,955	$ 18,704	$ 71,957
Petroleum and natural gas production	229,276	11	890	14,849	98,868	0	8,595	9,992	5,512	90,559
Other mining	111,223	2	1,390	14,295	16,337	22,610	243	23,128	12,060	21,158
Electric services[a]	8,693,019	167,243	984,702	43,823	50,657	431,507	123,139	3,526,427	276,448	3,089,073
Other transportation, communication, and public utilities	408,828	20,609	34,253	81,733	85,901	6,721	10,614	29,290	11,489	128,218
Hotels, rooming houses, and camps	193,306	7,151	25,493	45,047	15,782	10,156	4,782	1,074	13,525	70,296
Laundries, cleaning and dyeing	164,781	6,503	13,782	44,427	2,867	7,442	7,019	1,162	5,481	76,098
Other services	1,892,707	64,389	176,650	767,896	145,681	86,838	64,152	39,737	74,498	472,866
Other non-manufacturing	1,624,996	120,923	226,757	570,156	136,139	37,008	37,127	4,934	46,077	445,874
Food and kindred products	1,135,245	12,222	110,144	314,607	201,837	92,917	48,647	29,169	15,924	309,777
Textile products, apparel, fabrics, etc.	270,267	16,003	16,554	17,125	848	167,623	24,241	380	314	27,179
Furniture, lumber, and other wood products	163,813	685	10,812	31,858	5,569	26,104	13,995	25,220	2,169	47,401
Paper and allied products	791,030	16,555	100,704	197,697	24,818	96,081	105,015	17,639	31,548	200,973
Carbon black	9,976	0	0	1,633	0	3,694	1,390	1,135	0	2,124
Chemicals and allied products (except carbon black)	2,051,301	16,264	130,837	334,965	282,979	343,452	107,868	669,623	8,580	156,733
Petroleum refining	488,352	4	19,208	61,485	24,840	29,278	7,421	27,973	19,355	298,788
Rubber and miscellaneous plastic products	197,481	4,849	23,897	78,735	13,428	26,604	23,302	4,704	813	21,149
Glass products	429,443	10,841	119,912	79,312	13,354	63,860	34,792	10,383	0	96,989
Cement	35,363	0	491	2,186	7,265	2,344	5,121	1,737	2,825	13,394
Clay products, pottery, etc.	254,079	2,902	21,594	27,806	19,847	124,943	23,799	4,529	1,845	26,814
Other stone products and miscellaneous	223,292	8,214	33,806	42,082	31,196	25,050	11,300	2,897	5,833	62,914
Primary iron and steel industries	1,123,360	14,031	171,266	648,770	67,543	43,203	112,071	3,122	12,808	50,546
Primary non-ferrous industries	562,798	9,935	42,414	243,549	33,295	24,196	56,028	27,308	39,735	86,338
Fabricated metal products, machinery equipment and supplies	957,537	36,600	129,663	468,468	63,600	41,284	48,634	16,550	9,709	143,029
Transportation equipment	404,121	10,886	27,882	215,189	40,073	25,530	13,636	8,215	1,375	61,335
Other manufacturing	613,265	15,931	80,326	155,996	31,337	44,954	47,316	160,155	7,633	69,617
Public administration	450,563	11,050	72,020	76,260	43,800	56,694	24,522	34,581	22,529	109,107
Unclassified	13,951,654	536,358	2,322,093	2,577,459	1,368,421	1,870,552	922,383	2,717,114	1,050,460	586,814
Total Gas Utility Industry Commercial, Industrial and "Other" revenues[b]	**$37,639,466**	**$1,113,128**	**$4,901,185**	**$7,195,585**	**$2,857,444**	**$3,711,508**	**$1,892,114**	**$7,434,133**	**$1,697,249**	**$6,837,120**
Total Commercial, Industrial and "Other" revenues of co.'s reporting this table	**$26,851,517**	**$ 759,826**	**$3,185,827**	**$5,837,665**	**$2,187,029**	**$2,712,108**	**$1,193,681**	**$3,606,799**	**$1,011,488**	**$6,357,094**
Transfers[a]	**$ 1,210,334**	**$ 5,443**	**$ 685,419**	**$ 4,283**	**$ 8,630**	**$ 31,904**	**$ 1,294**	**$ 460,203**	**$ 16,158**	**$ 0**

a. Includes "revenues" detailed as transfers of gas for electric generation which are not included in Total Commercial, Industrial and "Other" revenues of companies reporting this table or in Total Gas Utility Industry revenues. Such "revenues" represent credits by the electric department of combination gas and electric companies.

TABLE 7-10
GAS UTILITY INDUSTRY REVENUES, GAS USED FOR ELECTRIC GENERATION, BY STATE, 1985[a]

(Thousands)

Division and State	Industrial Revenue			Credits[b]	Total Revenue and Credits
	Firm	Interruptible	Total		
United States	**$2,857,907**	**$4,569,758**	**$7,427,665**	**$1,210,334**	**$8,637,999**
New England	**1,105**	**160,681**	**161,786**	**5,443**	**167,229**
Connecticut	0	0	0	5,443	5,443
Maine	0	0	0	0	0
Massachusetts	1,105	150,539	151,644	0	151,644
New Hampshire	0	0	0	0	0
Rhode Island	0	10,142	10,142	0	10,142
Vermont	0	0	0	0	0
Middle Atlantic	**3,615**	**295,070**	**298,685**	**685,419**	**984,104**
New Jersey	844	82,167	83,011	158,717	241,728
New York	683	212,903	213,586	526,702	740,288
Pennsylvania	2,088	0	2,088	0	2,088
East North Central	**25,357**	**11,441**	**36,798**	**4,283**	**41,081**
Illinois	18,818	3,962	22,780	437	23,217
Indiana	826	3	829	3,846	4,675
Michigan	3,555	2,038	5,593	0	5,593
Ohio	1,184	841	2,025	0	2,025
Wisconsin	974	4,597	5,571	0	5,571
West North Central	**5,927**	**38,876**	**44,803**	**5,630**	**50,433**
Iowa	1,821	4,919	6,740	1,208	7,948
Kansas	1,629	21,973	23,602	1,797	25,399
Minnesota	93	3,971	4,064	2,113	6,177
Missouri	22	6,830	6,852	477	7,329
Nebraska	2,362	1,097	3,459	3	3,462
North Dakota	0	42	42	0	42
South Dakota	0	44	44	32	76
South Atlantic	**6,041**	**393,139**	**399,180**	**31,904**	**431,084**
Delaware	3,374	0	3,374	23,071	26,445
District of Columbia	0	0	0	0	0
Florida	2,426	388,484	390,910	0	390,910
Georgia	0	3,464	3,464	0	3,464
Maryland	241	0	241	2,875	3,116
North Carolina	0	102	102	0	102
South Carolina	0	410	410	1,304	1,714
Virginia	0	0	0	4,654	4,654
West Virginia	0	679	679	0	679
East South Central	**109,092**	**12,751**	**121,843**	**1,294**	**123,137**
Alabama	118	244	362	0	362
Kentucky	0	0	0	1,294	1,294
Mississippi	108,974	12,452	121,426	0	121,426
Tennessee	0	55	55	0	55
West South Central	**2,403,689**	**662,534**	**3,066,223**	**460,203**	**3,526,426**
Arkansas	24,694	2	24,696	0	24,696
Louisiana	181,468	18,795	200,263	86,715	286,978
Oklahoma	29,210	9,686	38,896	183,177	222,073
Texas	2,168,317	634,051	2,802,368	190,311	2,992,679
Mountain	**246,067**	**14,223**	**260,290**	**16,158**	**276,448**
Arizona	160,783	205	160,988	0	160,988
Colorado	5,089	13,919	19,008	1,044	20,052
Idaho	0	0	0	0	0
Montana	133	99	232	160	392
Nevada	36,546	0	36,546	14,787	51,333
New Mexico	41,543	0	41,543	0	41,543
Utah	1,339	0	1,339	0	1,339
Wyoming	634	0	634	167	801
Pacific	**57,014**	**2,981,043**	**3,038,057**	**0**	**3,038,057**
Alaska	0	31,316	31,316	0	31,316
California	56,986	2,949,727	3,006,713	0	3,006,713
Hawaii	0	0	0	0	0
Oregon	0	0	0	0	0
Washington	28	0	28	0	IN

a. Excludes revenues from direct sales by producers to electric utilities.
b. Represents "Revenues" from transfers of gas for electric generation. Such "Revenues" are credits by the electric department to the gas department of combination gas and electric companies.

SECTION 8
CUSTOMERS

	Average Customers	
	1985	% Change 85/84
Gas Utility Industry		
(Thousands)		
Total	49,971.3	+1.3
Residential	45,929.3	+1.2
Commercial	3,815.7	+2.3
Industrial	179.1	−0.6
Other	47.3	+0.2

TABLE 8-1
GAS UTILITY INDUSTRY CUSTOMERS, BY CLASS OF SERVICE, YEARLY AVERAGES, 1960-1985[a]

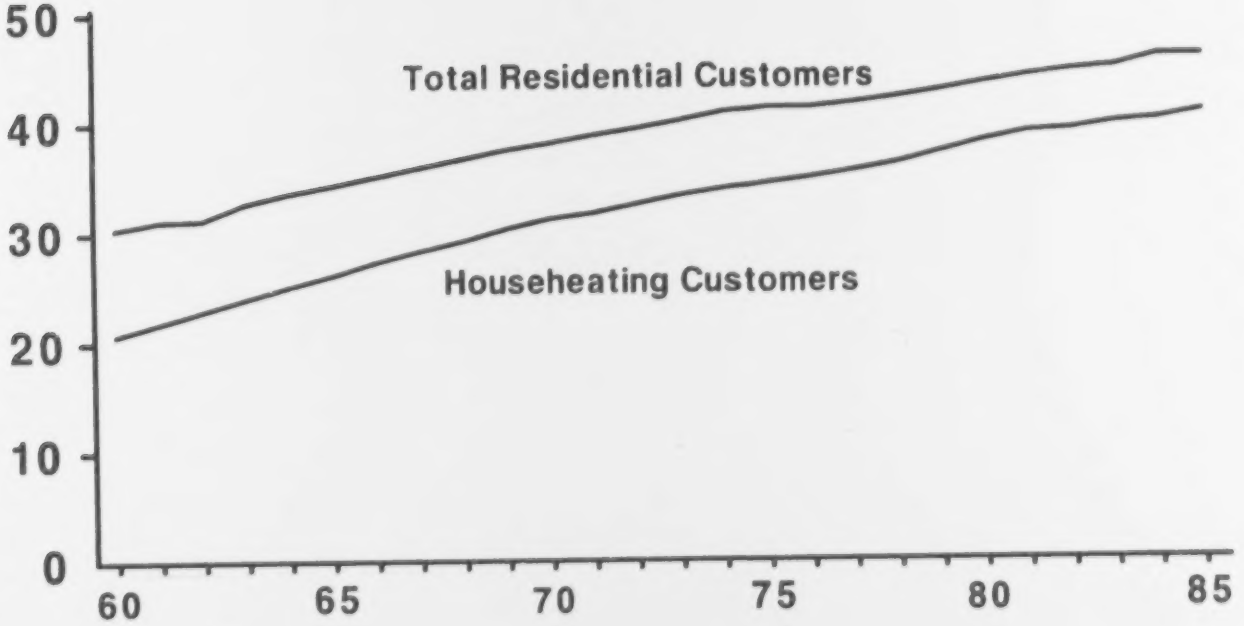
(Thousands)

Year	Total	Residential	Commercial	Industrial[b]	Other[b]
1960	33,053.8	30,417.5	2,458.3	140.6	37.4
1961	33,830.5	31,118.2	2,528.9	146.7	36.7
1962	34,683.4	31,893.0	2,597.9	155.9	36.6
1963	35,551.0	32,710.8	2,639.6	161.7	38.9
1964	36,463.3	33,551.2	2,712.2	159.4	40.5
1965	37,337.5	34,340.8	2,789.7	166.2	40.8
1966	38,228.4	35,141.8	2,868.2	173.9	44.5
1967	39,076.5	35,915.1	2,933.6	181.2	46.6
1968	39,930.0	36,691.1	3,003.6	188.1	47.2
1969	40,854.0	37,538.3	3,073.8	192.7	49.2
1970	41,482.1	38,097.0	3,130.9	199.1	55.1
1971	42,241.9	38,788.7	3,199.0	204.7	49.5
1972	42,954.8	39,428.0	3,263.6	209.2	54.1
1973	43,711.2	40,115.5	3,331.4	209.1	55.2
1974	44,267.2	40,626.7	3,392.0	193.8	54.7
1975	44,554.5	40,950.3	3,366.9	183.5	53.8
1976	44,941.4	41,337.6	3,371.5	179.7	52.6
1977	45,274.0	41,682.4	3,371.0	173.3	47.3
1978	45,788.9	42,183.2	3,369.8[c]	189.2[c]	46.7
1979	46,478.3	42,821.3	3,422.8	189.4	44.8
1980	47,225.1	43,489.4	3,499.9	187.2	48.6
1981	47,947.5	44,149.3	3,564.5	187.2	46.5
1982	48,414.9	44,552.3	3,631.1	186.1	45.4
1983	48,799.2	44,893.8	3,676.3	182.2	46.8
1984[R]	49,324.6	45,366.9	3,730.3	180.2	47.2
1985	49,971.3	45,929.3	3,815.7	179.1	47.3

a. Excludes data for Alaska prior to 1961.
b. Prior to 1976, "Other" electric generation customers included in the "Other" class of service. For 1976 and beyond all electric generation customers included in the Industrial category.
c. Reclassification of customers from commercial to industrial.
R–Revised.

CHART 8-2

GAS UTILITY HOUSEHEATING CUSTOMERS (MILLIONS)



REFERENCE: TABLE 8-6

TABLE 8-2
GAS UTILITY INDUSTRY AVERAGE CUSTOMERS, BY QUARTER, 1960-1985

(Thousands)

Year and Quarter	Total	Residential	Commercial	Industrial[a]	Other[a]
1960					
First	32,882	30,220	2,486	139	37
Second	32,685	30,098	2,409	141	37
Third	32,638	30,099	2,363	140	36
Fourth	33,508	30,802	2,524	141	41
1965					
First	37,174	34,156	2,814	163	41
Second	36,963	34,014	2,743	165	41
Third	36,932	34,021	2,704	167	40
Fourth	37,967	34,886	2,870	169	42
1970					
First	41,491	38,063	3,175	199	54
Second	41,419	38,058	3,109	199	53
Third	41,080	37,773	3,054	198	55
Fourth	41,939	38,494	3,186	201	58
1975					
First	44,762	41,099	3,406	194	63
Second	44,386	40,806	3,348	181	51
Third	44,233	40,686	3,322	177	48
Fourth	44,839	41,210	3,393	182	54
1978					
First	45,931	42,285	3,410	190	47
Second	45,761	42,149	3,376	190	47
Third	45,468	41,918	3,316	188	46
Fourth	45,996	42,382	3,378	189	47
1979					
First	46,553	42,869	3,449	190	45
Second	46,410	42,754	3,422	190	45
Third	46,242	42,635	3,375	189	44
Fourth	46,708	43,027	3,446	189	45
1980					
First	47,394	43,605	3,552	188	49
Second	47,190	43,443	3,511	187	49
Third	46,873	43,210	3,429	186	48
Fourth	47,444	43,699	3,509	187	49
1981					
First	48,159	44,315	3,609	188	47
Second	47,942	44,140	3,567	188	47
Third	47,573	43,839	3,503	186	45
Fourth	48,116	44,303	3,580	186	47
1982					
First	48,723	44,803	3,687	188	45
Second	48,429	44,558	3,638	187	46
Third	47,990	44,197	3,564	184	45
Fourth	48,517	44,650	3,636	185	46
1983					
First	49,089	45,127	3,731	184	47
Second	48,813	44,900	3,683	183	47
Third	48,348	44,512	3,609	181	46
Fourth	48,946	45,035	3,683	181	47
1984					
First	49,587	45,585	3,773	181	48
Second	49,322	45,363	3,732	180	47
Third	48,896	45,004	3,666	179	47
Fourth	49,494	45,516	3,751	180	47
1985					
First	50,244	46,147	3,868	181	48
Second	49,917	45,876	3,814	180	47
Third	49,567	45,595	3,747	178	47
Fourth	50,158	46,099	3,834	178	47

a. Prior to 1976, "Other" electric generation customers included in the "Other" class of service. For 1976 and beyond all electric generation customers included in the Industrial category.

TABLE 8-3
GAS UTILITY INDUSTRY AVERAGE CUSTOMERS, BY STATE, 1960-1985[a]

(Thousands)

Division and State	1960	1965	1970	1975	1980	1984[R]	1985
United States	**33,083.8**	**37,337.5**	**41,682.1**	**44,554.5**	**47,225.1**	**49,324.6**	**49,971.3**
New England	**1,622.6**	**1,641.6**	**1,692.3**	**1,692.5**	**1,734.6**	**1,808.6**	**1,839.3**
Connecticut	376.7	378.8	393.7	392.5	405.0	426.3	433.0
Maine	33.4	28.5	23.4	18.1	15.0	15.3	15.2
Massachusetts	1,002.3	1,024.7	1,055.3	1,055.4	1,079.3	1,114.4	1,130.3
New Hampshire	37.4	40.2	44.1	45.4	50.9	55.1	57.9
Rhode Island	155.9	154.5	161.4	164.6	168.9	180.6	184.8
Vermont	16.9	14.9	14.4	16.6	15.4	17.0	18.0
Middle Atlantic	**7,607.6**	**7,919.6**	**8,192.1**	**8,230.3**	**8,111.4**	**8,290.4**	**8,362.7**
New Jersey	1,504.9	1,640.6	1,763.1	1,815.1	1,849.1	1,916.2	1,955.2
New York	3,953.5	4,076.4	4,125.6	4,102.5	3,925.5	3,997.7	4,023.5
Pennsylvania	2,149.2	2,202.5	2,303.4	2,312.7	2,336.8	2,376.5	2,384.0
East North Central	**7,318.9**	**8,400.3**	**9,508.7**	**10,253.1**	**10,777.8**	**11,026.8**	**11,118.9**
Illinois	2,279.4	2,634.6	2,938.4	3,134.2	3,304.2	3,338.4	3,355.8
Indiana	780.0	933.8	1,084.4	1,187.7	1,241.1	1,298.7	1,310.0
Michigan	1,502.1	1,732.9	2,018.5	2,234.5	2,443.3	2,522.0	2,550.9
Ohio	2,208.4	2,424.2	2,644.5	2,757.8	2,746.5	2,775.1	2,794.1
Wisconsin	549.0	674.8	822.9	939.0	1,042.7	1,092.6	1,108.1
West North Central	**2,655.5**	**3,074.7**	**3,499.9**	**3,820.4**	**4,126.5**	**4,329.4**	**4,373.4**
Iowa	440.4	541.9	642.1	691.6	745.4	762.6	764.2
Kansas	532.8	586.5	643.1	669.8	723.0	774.6	787.3
Minnesota	476.1	560.9	640.9	726.8	809.4	892.6	909.8
Missouri	816.8	933.4	1,068.2	1,167.1	1,218.4	1,230.1	1,241.0
Nebraska	288.4	330.2	367.7	400.5	442.4	466.7	466.3
North Dakota	39.4	47.4	55.2	71.3	85.7	93.9	94.6
South Dakota	61.6	74.4	82.6	93.1	102.4	108.9	110.1
South Atlantic	**2,507.3**	**2,995.6**	**3,528.9**	**3,861.9**	**4,042.2**	**4,319.0**	**4,404.6**
Delaware	64.2	73.3	81.4	82.8	81.5	84.2	85.2
District of Columbia	177.3	172.4	162.8	155.4	148.6	145.4	145.3
Florida	244.1	294.2	370.1	391.8	433.0	455.6	460.5
Georgia	534.9	670.9	804.4	912.3	1,025.9	1,149.8	1,195.6
Maryland	558.7	639.6	712.5	774.6	773.5	796.8	803.0
North Carolina	121.6	193.2	285.2	338.0	366.7	429.2	444.5
South Carolina	87.0	154.7	233.3	283.1	296.2	315.4	319.3
Virginia	361.8	432.7	497.3	528.4	523.2	553.2	563.8
West Virginia	357.2	364.6	381.9	395.4	393.6	389.4	387.3
East South Central	**1,470.9**	**1,699.6**	**1,947.2**	**2,139.2**	**2,211.6**	**2,270.1**	**2,285.7**
Alabama	453.3	522.1	588.8	637.1	679.0	686.2	688.4
Kentucky	432.9	506.0	583.0	631.3	626.7	642.1	643.7
Mississippi	271.2	310.6	347.3	380.3	396.7	401.4	403.5
Tennessee	313.5	360.9	428.1	490.5	509.3	540.4	550.2
West South Central	**3,840.3**	**4,329.9**	**4,758.5**	**5,092.0**	**5,509.8**	**5,815.3**	**5,847.6**
Arkansas	299.1	362.1	419.3	461.4	489.9	525.4	530.9
Louisiana	701.2	804.7	871.3	935.9	1,002.3	1,001.8	995.8
Oklahoma	602.8	648.7	697.6	740.5	816.4	898.4	902.8
Texas	2,237.2	2,514.4	2,770.3	2,954.2	3,201.2	3,389.8	3,418.1
Mountain	**1,267.8**	**1,587.3**	**1,892.9**	**2,311.6**	**2,700.3**	**2,958.1**	**3,041.1**
Arizona	300.3	374.1	447.5	554.1	579.1	593.5	595.4
Colorado	388.4	485.7	586.5	688.8	850.1	971.2	1,011.1
Idaho	27.0	52.2	79.0	107.5	108.6	114.6	116.9
Montana	118.6	137.6	150.8	173.4	182.7	188.5	189.1
Nevada	24.6	47.8	72.4	112.2	168.2	193.2	201.2
New Mexico	176.6	203.8	231.8	278.9	327.6	357.4	367.1
Utah	166.5	211.9	243.8	297.4	361.0	412.2	432.8
Wyoming	65.8	74.2	81.1	99.2	122.9	127.6	127.5
Pacific	**4,762.9**	**5,688.9**	**6,461.6**	**7,153.5**	**8,010.8**	**8,507.0**	**8,697.9**
Alaska	b	6.1	17.4	29.1	42.1	65.4	72.2
California	4,506.6	5,311.1	5,919.4	6,495.1	7,286.3	7,721.0	7,888.0
Hawaii	39.8	36.2	36.1	34.8	33.2	32.7	32.8
Oregon	105.6	146.2	197.5	248.2	275.3	295.9	303.6
Washington	110.9	189.3	291.2	346.3	373.9	392.0	401.3

a. Excludes customers purchasing for resale.
b. Not available.
R–Revised.

TABLE 8-4
GAS UTILITY INDUSTRY CUSTOMERS, BY STATE AND CLASS OF SERVICE, AVERAGES, 1985

(Thousands)

Division and State	Total	Class of Service				
		Residential	Commercial	Industrial	Electric Generation	Other
United States	**49,971.3**	**45,929.3**	**3,815.7**	**178.6**	**0.5**	**47.3**
New England	**1,839.3**	**1,684.2**	**144.3**	**6.8**	**a**	**4.0**
Connecticut	433.0	394.0	36.5	2.5	0.0	0.1
Maine	15.2	12.2	3.0	0.1	0.0	0.0
Massachusetts	1,130.3	1,041.9	82.2	2.9	a	3.3
New Hampshire	57.9	50.1	7.5	0.1	0.0	0.2
Rhode Island	184.8	170.4	13.2	1.2	a	a
Vermont	18.0	15.6	1.9	a	0.0	0.5
Middle Atlantic	**8,362.7**	**7,736.6**	**589.8**	**25.4**	**a**	**10.8**
New Jersey	1,955.2	1,760.6	188.1	6.5	a	a
New York	4,023.5	3,752.7	248.6	13.1	a	9.0
Pennsylvania	2,384.0	2,223.3	153.1	5.8	a	1.7
East North Central	**11,118.9**	**10,246.6**	**820.5**	**47.8**	**0.1**	**3.9**
Illinois	3,355.8	3,081.6	254.6	18.6	a	0.9
Indiana	1,310.0	1,196.7	108.0	4.9	a	0.5
Michigan	2,550.9	2,371.7	169.3	9.9	a	0.0
Ohio	2,794.1	2,585.9	199.2	6.5	a	2.5
Wisconsin	1,108.1	1,010.8	89.3	8.0	a	a
West North Central	**4,373.4**	**3,937.9**	**420.2**	**13.3**	**0.2**	**1.9**
Iowa	764.2	681.0	81.1	1.7	0.1	0.3
Kansas	787.3	702.2	80.1	4.6	0.1	0.3
Minnesota	909.8	824.0	81.2	4.1	a	0.4
Missouri	1,241.0	1,145.0	94.3	1.0	a	0.7
Nebraska	466.3	404.5	60.2	1.3	a	0.2
North Dakota	94.6	83.2	11.4	a	a	0.0
South Dakota	110.1	97.9	11.8	0.5	a	a
South Atlantic	**4,404.6**	**4,026.5**	**357.7**	**15.1**	**a**	**5.3**
Delaware	85.2	79.5	5.4	0.2	a	0.1
District of Columbia	145.3	130.7	14.7	0.0	0.0	0.0
Florida	460.5	421.4	37.9	0.5	a	0.7
Georgia	1,195.6	1,103.1	86.6	2.7	a	3.3
Maryland	803.0	745.5	52.3	5.2	a	0.1
North Carolina	444.5	392.6	49.3	2.6	a	0.1
South Carolina	319.3	286.1	31.5	1.2	a	0.4
Virginia	563.8	512.2	48.6	2.4	0.0	0.6
West Virginia	387.3	355.5	31.4	0.3	a	0.1
East South Central	**2,285.7**	**2,087.8**	**211.1**	**6.5**	**a**	**10.3**
Alabama	688.4	635.1	48.8	2.0	a	2.5
Kentucky	643.7	583.9	57.2	1.3	0.0	1.3
Mississippi	403.5	363.0	37.5	1.1	a	1.9
Tennessee	550.2	475.8	67.7	2.1	a	4.6
West South Central	**5,847.6**	**5,336.8**	**484.8**	**20.4**	**0.1**	**7.6**
Arkansas	530.9	469.1	60.0	1.6	a	0.1
Louisiana	995.8	928.2	64.9	1.5	a	1.3
Oklahoma	902.8	814.2	85.3	3.1	a	0.2
Texas	3,418.1	3,123.3	274.5	14.2	0.1	6.0
Mountain	**3,041.1**	**2,752.6**	**279.4**	**5.8**	**a**	**3.3**
Arizona	595.4	549.1	44.9	0.9	a	0.5
Colorado	1,011.1	903.9	105.8	1.2	a	0.1
Idaho	116.9	100.2	16.5	0.2	0.0	0.0
Montana	189.1	167.6	21.0	0.5	a	0.1
Nevada	201.2	184.8	16.3	0.1	a	a
New Mexico	367.1	329.8	32.6	2.2	a	2.5
Utah	432.8	403.3	29.0	0.6	a	a
Wyoming	127.5	113.9	13.3	0.2	a	a
Pacific	**8,697.9**	**8,152.2**	**508.1**	**37.4**	**a**	**0.2**
Alaska	72.2	61.9	10.3	0.0	a	0.0
California	7,888.0	7,444.8	411.1	31.9	a	0.1
Hawaii	32.8	29.1	2.0	1.7	0.0	0.0
Oregon	303.6	264.8	38.1	0.7	0.0	0.0
Washington	401.3	351.6	46.5	3.2	a	a

a. Less than 0.05 thousand.

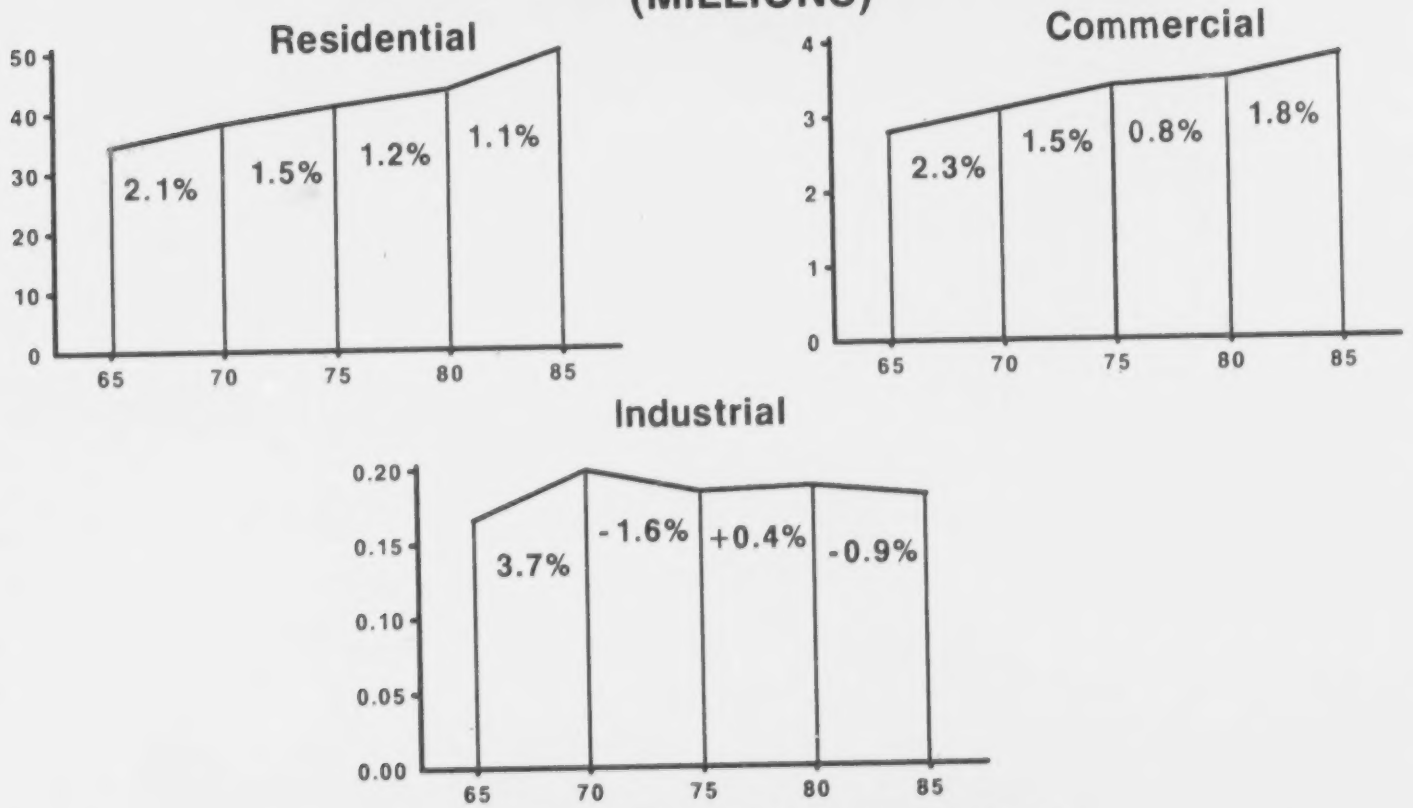
TABLE 8-5
GAS UTILITY INDUSTRY HOUSEHEATING CUSTOMERS, BY STATE, YEARLY AVERAGES FOR 1970–1985

(Thousands)

Division and State	1970	1975	1980	1984	1985	
					Number	Saturation[a]
United States	**31,208.7**	**34,371.4**	**38,162.6**	**40,037.0**	**40,781.5**	**88.8**
New England	**778.8**	**857.1**	**1,008.8**	**1,113.2**	**1,138.3**	**67.6**
Connecticut	181.0	195.8	216.3	256.4	254.1	64.5
Maine	5.7	4.8	6.7	9.4	9.2	75.4
Massachusetts	443.3	531.5	635.6	677.4	698.1	67.0
New Hampshire	24.2	28.0	36.0	38.3	40.3	80.5
Rhode Island	116.0	86.3	103.0	119.0	123.1	72.2
Vermont	8.6	10.7	11.2	12.7	13.5	86.7
Middle Atlantic	**3,827.2**	**4,127.7**	**4,514.6**	**4,909.5**	**5,011.2**	**64.8**
New Jersey	713.7	793.4	942.6	1,105.3	1,156.7	65.7
New York	1,536.7	1,686.2	1,797.0	1,915.3	1,951.4	52.0
Pennsylvania	1,576.8	1,648.1	1,775.0	1,874.4	1,903.1	85.6
East North Central	**7,527.9**	**8,432.0**	**9,166.2**	**9,583.5**	**9,671.3**	**94.4**
Illinois	2,107.4	2,390.9	2,616.6	2,734.3	2,758.1	89.5
Indiana	813.0	947.6	1,049.9	1,144.6	1,158.4	96.8
Michigan	1,647.3	1,901.2	2,162.0	2,278.6	2,302.9	97.1
Ohio	2,379.2	2,482.0	2,507.3	2,520.8	2,534.1	98.0
Wisconsin	581.0	710.3	830.4	905.2	917.8	90.8
West North Central	**2,915.5**	**3,260.7**	**3,589.9**	**3,720.4**	**3,753.0**	**95.3**
Iowa	515.8	572.9	632.9	653.4	657.9	96.6
Kansas	563.4	595.4	649.6	648.3	649.5	92.5
Minnesota	513.1	598.3	690.9	768.9	783.7	95.1
Missouri	915.6	1,022.8	1,082.8	1,080.0	1,090.1	95.2
Nebraska	298.4	336.2	375.1	397.1	397.3	98.2
North Dakota	41.8	56.5	70.6	78.2	78.9	94.9
South Dakota	67.4	78.6	88.0	94.5	95.6	97.7
South Atlantic	**2,599.2**	**2,969.9**	**3,312.7**	**3,587.9**	**3,625.9**	**90.1**
Delaware	42.5	46.6	51.9	53.9	55.4	69.7
District of Columbia	83.2	86.1	92.0	97.1	98.3	75.2
Florida	247.9	261.7	368.3	411.1	370.8	88.0
Georgia	718.9	810.7	946.0	1,028.2	1,066.7	96.7
Maryland	443.3	528.8	550.2	588.7	594.9	79.8
North Carolina	209.6	274.4	288.2	363.2	380.0	96.8
South Carolina	179.7	226.9	257.1	254.3	260.1	90.9
Virginia	339.0	378.3	402.8	439.5	450.2	87.9
West Virginia	335.1	356.4	356.2	351.9	349.5	98.3
East South Central	**1,695.1**	**1,868.0**	**1,965.4**	**2,001.9**	**2,008.2**	**97.6**
Alabama	539.2	579.9	625.3	620.3	623.0	98.1
Kentucky	490.1	538.0	562.3	567.9	561.2	96.1
Mississippi	311.0	341.8	356.1	357.7	358.6	98.8
Tennessee	354.8	408.3	421.7	456.0	465.4	97.8
West South Central	**4,278.3**	**4,496.0**	**4,997.8**	**5,107.2**	**4,982.8**	**93.4**
Arkansas	371.0	405.8	433.9	463.2	379.1	80.8
Louisiana	737.3	859.3	931.3	924.6	894.8	96.4
Oklahoma	628.3	665.7	731.8	803.7	782.4	96.1
Texas	2,541.7	2,565.2	2,900.8	2,915.7	2,926.5	93.7
Mountain	**1,646.2**	**2,040.4**	**2,406.4**	**2,661.5**	**2,649.2**	**96.2**
Arizona	390.0	492.4	509.1	546.6	475.0	86.5
Colorado	508.7	610.9	759.1	854.3	903.8	100.0
Idaho	65.9	91.4	82.2	97.3	99.0	98.8
Montana	126.9	147.1	161.8	166.9	167.0	99.6
Nevada	65.9	100.7	155.3	175.9	162.3	87.8
New Mexico	203.4	239.4	291.6	320.4	330.0	100.0
Utah	217.6	272.6	338.3	386.5	398.8	98.9
Wyoming	67.8	85.9	109.0	113.6	113.3	99.5
Pacific	**5,940.5**	**6,319.6**	**7,200.8**	**7,351.9**	**7,941.6**	**97.4**
Alaska	14.4	24.0	36.2	57.2	61.9	100.0
California	5,506.9	5,794.5	6,618.4	6,715.0	7,288.5	97.9
Hawaii	0.0	0.0	0.0	0.0	0.0	0.0
Oregon	166.3	206.7	224.9	243.0	245.2	92.6
Washington	252.9	294.4	321.3	336.7	346.0	98.4

a. Percentages refer to proportion of residential gas customers using gas for heating.
Source: A.G.A. *Gas Househeating Survey*. Data represent average number of customers developed from number of year-end customers as shown in survey.

GAS UTILITY INDUSTRY CUSTOMERS (MILLIONS)



% Equals Compound Annual Growth Rates

REFERENCE: TABLE 8-1

TABLE 8-6
GAS UTILITY INDUSTRY HOUSEHEATING CUSTOMERS AND HEATING SATURATIONS[a] BY CENSUS DIVISION, 1960–1985 YEARLY AVERAGES[b]

(Thousands)

Census Division	1960		1965		1970		1975	
	Customers	Percent	Customers	Percent	Customers	Percent	Customers	Percent
United States	**20,739**	**68.2**	**26,297**	**76.1**	**31,209**	**81.9**	**34,372**	**84.1**
New England	386	25.3	583	36.8	779	48.6	857	54.8
Middle Atlantic	2,475	35.1	3,212	43.2	3,827	50.3	4,128	54.1
East North Central	4,369	64.3	6,091	77.6	7,528	85.6	8,432	89.4
West North Central	1,999	82.6	2,485	88.6	2,916	92.2	3,261	94.5
South Atlantic	1,533	66.7	2,073	74.9	2,599	80.9	2,970	84.2
East South Central	1,161	87.4	1,422	92.4	1,695	96.4	1,868	96.5
West South Central	3,457	99.7	3,900	99.5	4,278	99.0	4,496	97.1
Mountain	1,081	95.5	1,366	96.4	1,646	97.3	2,040	98.0
Pacific	4,278	97.3	5,165	97.3	5,941	98.3	6,320	94.6

Census Division	1980		1983		1984		1985	
	Customers	Percent	Customers	Percent	Customers	Percent	Customers	Percent
United States	**38,163**	**87.8**	**39,799**	**88.7**	**40,037**	**88.3**	**40,781**	**88.8**
New England	1,009	63.1	1,080	65.8	1,113	67.1	1,138	67.6
Middle Atlantic	4,515	60.0	4,842	63.3	4,910	63.9	5,011	64.8
East North Central	9,166	92.1	9,503	93.9	9,584	94.2	9,671	94.4
West North Central	3,590	96.3	3,751	96.9	3,720	95.3	3,753	95.3
South Atlantic	3,313	89.4	3,525	90.5	3,588	90.8	3,626	90.1
East South Central	1,965	98.5	1,972	97.0	2,002	97.8	2,008	97.6
West South Central	4,998	99.5	5,153	98.0	5,107	96.2	4,983	93.4
Mountain	2,406	98.2	2,570	98.5	2,661	99.3	2,649	96.2
Pacific	7,201	95.8	7,405	94.6	7,352	92.2	7,942	97.4

a. Percentages refer to proportion of total residential customers, within specified areas, using gas for heating.
b. Excludes data for Alaska prior to 1961.
Source: *A.G.A. Gas Househeating Survey.* Data represent average number of customers developed from number of year-end customers as shown in survey.

SECTION 9
PRICES

	1985	% Change 85/84*
Gas Utility Industry		
($/MMBtu)		
Total	$ 5.02	−2.1
Residential	5.95	+0.2
Commercial	5.44	−1.3
Industrial	4.10	−6.0
Other	4.79	−1.6
Wellhead ($/Mcf)	2.48	−5.7
City Gate	3.82	−1.8
Electric	21.63	+3.1
Number 2 Fuel Oil	7.75	−4.1

*Percentage change based on unrounded data for both years. Percentage change for wellhead price based on preliminary data for both years.

Prices in this section, unless cited as a source other than A.G.A., were developed using the following methodology. Total revenues for a specific segment and time period are divided by the corresponding total sales for that specific segment and time period. For example, the residential price (average 1985) for the state of New York was obtained by dividing total 1985 residential revenues in New York by the total 1985 residential sales in New York. Likewise, the residential price (average 1985) for the total United States was obtained by dividing total 1985 residential revenues in the United States by the total 1985 residential sales in the United States.

TABLE 9-1
AVERAGE WELLHEAD PRICES OF NATURAL GAS, BY STATE, 1960-1984[a]

(¢/MCF)

Division and State	1960	1965	1970	1975	1980	1983	1984
United States	**14.0¢**	**15.6¢**	**17.1¢**	**44.5¢**	**158.8¢**	**259.3¢**	**265.5¢**
New England	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Middle Atlantic	**31.8**	**26.9**	**28.0**	**68.0**	**210.2**	**311.1**	**334.8**
New Jersey	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New York	30.9	30.8	30.3	74.0	194.9	385.1	400.0
Pennsylvania	31.8	26.7	27.9	67.5	212.7	300.0	325.0
East North Central	**21.0**	**23.1**	**26.4**	**66.6**	**217.6**	**339.9**	**343.3**
Illinois	12.5	11.7	15.7	70.0	190.0	284.1	278.0
Indiana	18.8	23.6	23.7	39.0	135.0	208.9	338.1
Michigan	21.4	25.1	26.7	63.4	235.5	358.0	375.9
Ohio	23.5	23.6	27.1	70.6	197.7	323.8	318.6
Wisconsin	0.0	0.0	0.0	0.0	0.0	0.0	0.0
West North Central	**11.8**	**13.4**	**14.1**	**17.5**	**79.5**	**167.6**	**160.0**
Iowa	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kansas	11.7	13.3	14.0	17.2	77.2	156.8	148.8
Minnesota	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Missouri	25.0	24.5	24.5	34.0	0.0	0.0	375.0
Nebraska	17.5	14.6	17.1	54.1	82.9	293.1	224.0
North Dakota	11.4	16.0	16.4	23.0	118.8	227.0	226.4
South Dakota	0.0	0.0	0.0	0.0	b	336.8	367.0
South Atlantic	**26.2**	**23.4**	**25.5**	**50.4**	**274.2**	**300.1**	**335.8**
Delaware	0.0	0.0	0.0	0.0	0.0	0.0	0.0
District of Columbia	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Florida	16.2	12.9	0.0	97.3	173.0	233.2	257.0
Georgia	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maryland	26.6	25.2	24.9	27.0	45.6	54.8	58.3
North Carolina	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Carolina	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Virginia	27.1	29.9	30.8	51.5	285.0	330.0	300.0
West Virginia	26.2	23.5	25.4	36.9	300.0	310.0	345.0
East South Central	**20.5**	**19.3**	**20.7**	**59.3**	**223.2**	**355.7**	**321.8**
Alabama	7.3	12.7	13.9	87.0	318.6	428.3	373.5
Kentucky	24.4	23.6	24.6	54.0	89.3[c]	151.0	170.0
Mississippi	18.8	17.3	18.4	49.6	231.7	378.0	346.8
Tennessee	17.5	19.0	19.9	43.0	176.0	250.0	350.0
West South Central	**13.1**	**14.6**	**16.7**	**45.6**	**156.9**	**254.8**	**260.3**
Arkansas	11.9	15.6	16.3	34.7	69.6	229.3	254.4
Louisiana	17.1	18.2	19.3	42.3	160.7[c]	266.7	273.2
Oklahoma	11.9	13.8	15.6	32.0	150.7	283.0	271.8
Texas	11.3	12.9	14.4	51.9	156.5[d]	236.5[d]	244.5
Mountain	**11.2**	**12.1**	**14.3**	**38.2**	**172.6**	**290.9**	**301.1**
Arizona	0.0	12.1	17.1	28.0	b	307.6	291.1
Colorado	11.9	12.9	14.7	48.0	147.0	337.6	343.4
Idaho	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Montana	7.1	8.2	10.3	43.3	145.4	241.0	246.0
Nevada	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Mexico	10.7	11.8	14.3	40.5	175.8	268.4	271.5
Utah	18.0	12.5	15.1	48.0	111.7	340.4	408.2
Wyoming	12.0	13.5	14.7	33.7	192.0	318.0	331.7
Pacific	**26.7**	**30.8**	**31.0**	**56.7**	**210.7**	**243.3**	**264.0**
Alaska	12.2	24.8	24.6	30.2	73.2	73.0	72.9
California	26.7	30.9	32.1	70.0	217.0	356.7	379.9
Hawaii	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oregon	0.0	0.0	0.0	0.0	240.0	333.3	278.1
Washington	0.0	0.0	0.0	0.0	0.0	0.0	0.0

a. Reflects price at first point of transfer, representing sales made by producers. The 1985 U.S. average wellhead price of natural gas is estimated to be 248.0¢.
b. Not available.
c. Value data is for the period beginning June 1, 1980 and ending May 31, 1981.
d. Weighted average value obtained from separate onshore and OCS average value calculations.

Source: U.S. Department of Energy, Energy Information Administration, *Natural Gas Annual*, 1984.

TABLE 9-2
GAS UTILITY INDUSTRY AVERAGE PRICES BY CLASS OF SERVICE, 1960-1985[a]

($/MMBtu)

Year	Total	Residential	Commercial	Industrial	Other
1960	$0.60	$1.00	$0.79	$0.33	$0.33
1961	0.62	1.02	0.80	0.35	0.34
1962	0.63	1.02	0.80	0.35	0.34
1963	0.62	1.02	0.80	0.35	0.35
1964	0.62	1.01	0.78	0.35	0.36
1965	0.62	1.01	0.78	0.35	0.36
1966	0.61	1.00	0.78	0.35	0.36
1967	0.61	1.00	0.78	0.35	0.36
1968	0.61	1.00	0.77	0.35	0.36
1969	0.62	1.01	0.78	0.36	0.39
1970	0.64	1.06	0.81	0.38	0.41
1971	0.68	1.12	0.85	0.41	0.38
1972	0.73	1.19	0.91	0.45	0.41
1973	0.79	1.25	0.95	0.50	0.44
1974	0.95	1.42	1.11	0.66	0.60
1975	1.29	1.69	1.38	0.99	0.94
1976	1.60	1.98	1.68	1.31	1.36
1977	1.97	2.33	2.07	1.69	1.74
1978	2.18	2.53	2.28	1.90	1.79
1979	2.52	2.92	2.66	2.23	1.94
1980	3.13	3.61	3.34	2.79	2.67
1981	3.65	4.16	3.91	3.29	3.46
1982	4.46	4.97	4.72	4.00	4.30
1983	5.12	5.88	5.51	4.41	4.92
1984	5.13	5.94	5.51	4.36	4.87
1985	5.02	5.95	5.44	4.10	4.79

a. Excludes data for Alaska prior to 1961.

TABLE 9-3
GAS UTILITY INDUSTRY AVERAGE PRICES, BY STATE, 1960-1985[a]

($/MMBtu)

Division and State	1960	1965	1970	1975	1980	1984	1985
United States	**$0.60**	**$0.62**	**$0.64**	**$1.29**	**$ 3.13**	**$ 5.13**	**$ 5.02**
New England	**1.77**	**1.60**	**1.60**	**2.87**	**4.96**	**6.66**	**6.57**
Connecticut	1.66	1.51	1.60	2.93	4.99	7.16	7.28
Maine	2.78	2.96	2.23	3.04	5.15	8.26	7.44
Massachusetts	1.82	1.63	1.64	2.91	4.96	6.52	6.29
New Hampshire	1.71	1.71	1.54	2.21	4.25	6.80	6.70
Rhode Island	1.58	1.46	1.36	2.82	5.00	6.31	6.78
Vermont	3.49	2.93	2.22	2.06	5.66	5.74	5.71
Middle Atlantic	**1.07**	**1.04**	**1.06**	**1.97**	**3.98**	**6.27**	**6.31**
New Jersey	1.53	1.38	1.26	2.31	4.36	6.33	6.41
New York	1.29	1.20	1.21	2.14	4.43	6.55	6.57
Pennsylvania	0.81	0.81	0.87	1.68	3.45	5.92	5.94
East North Central	**0.[illegible]**	**0.73**	**0.74**	**1.34**	**3.17**	**5.16**	**5.27**
Illinois	0.77	0.74	0.73	1.35	3.26	4.86	5.05
Indiana	0.66	0.63	0.71	1.16	2.82	4.84	4.72
Michigan	0.81	0.80	0.78	1.43	3.06	5.31	5.66
Ohio	0.68	0.70	0.73	1.35	3.24	5.53	5.47
Wisconsin	1.02	0.82	0.80	1.31	3.42	5.36	5.36
West North Central	**0.52**	**0.53**	**0.56**	**1.00**	**2.68**	**4.84**	**4.61**
Iowa	0.61	0.62	0.62	1.04	2.81	4.71	4.61
Kansas	0.33	0.36	0.39	0.69	2.24	4.14	3.77
Minnesota	0.71	0.68	0.67	1.19	2.81	5.27	5.09
Missouri	0.56	0.56	0.54	1.18	3.04	5.34	4.98
Nebraska	0.52	0.51	0.51	0.90	2.34	4.33	4.33
North Dakota	0.67	0.68	0.82	1.26	3.57	6.06	5.28
South Dakota	0.58	0.65	0.71	1.05	2.81	5.45	5.07
South Atlantic	**0.73**	**0.72**	**0.72**	**1.39**	**3.28**	**5.39**	**5.29**
Delaware	1.14	0.96	0.93	1.73	3.46	5.78	5.53
District of Columbia	1.45	1.36	1.28	2.21	4.38	7.61	7.35
Florida	0.52	0.51	0.55	1.15	2.63	4.00	3.91
Georgia	0.55	0.61	0.57	1.12	3.17	5.23	5.31
Maryland	1.32	1.17	1.13	1.97	3.87	6.81	6.59
North Carolina	0.74	0.74	0.70	1.58	3.46	5.58	5.35
South Carolina	0.57	0.58	0.62	1.10	3.16	5.24	5.08
Virginia	1.05	0.98	0.95	1.78	3.58	6.02	5.93
West Virginia	0.60	0.59	0.64	1.24	3.27	5.48	5.65
East South Central	**0.52**	**0.50**	**0.51**	**1.03**	**2.85**	**4.51**	**4.55**
Alabama	0.52	0.51	0.52	1.04	3.11	4.85	4.81
Kentucky	0.63	0.64	0.67	1.11	2.90	4.82	4.90
Mississippi	0.41	0.39	0.38	0.95	2.71	4.00	3.93
Tennessee	0.54	0.50	0.53	1.00	2.69	4.35	4.51
West South Central	**0.29**	**0.32**	**0.35**	**0.99**	**2.53**	**4.14**	**3.89**
Arkansas	0.33	0.36	0.37	0.80	1.97	3.96	3.92
Louisiana	0.26	0.28	0.30	0.85	2.36	4.18	3.92
Oklahoma	0.35	0.40	0.46	0.79	2.05	3.70	3.73
Texas	0.28	0.31	0.35	1.10	2.72	4.23	3.91
Mountain	**0.43**	**0.46**	**0.49**	**0.99**	**2.84**	**4.85**	**4.66**
Arizona	0.47	0.52	0.57	1.19	2.82	5.19	4.81
Colorado	0.43	0.45	0.48	0.90	2.95	4.89	4.74
Idaho	0.53	0.57	0.67	1.48	4.03	5.26	5.19
Montana	0.43	0.47	0.54	1.03	3.03	4.85	4.64
Nevada	0.62	0.59	0.58	1.30	3.17	5.55	5.46
New Mexico	0.34	0.41	0.42	0.88	2.66	4.68	4.70
Utah	0.44	0.43	0.46	0.85	2.34	4.41	4.00
Wyoming	0.36	0.38	0.34	0.70	2.45	4.42	4.28
Pacific	**0.59**	**0.57**	**0.58**	**1.31**	**3.65**	**5.51**	**5.08**
Alaska	b	0.88	0.70	0.81	1.20	2.04	2.24
California	0.59	0.55	0.56	1.26	3.57	5.55	5.09
Hawaii	3.13	3.03	2.76	6.78	13.01	14.48	14.20
Oregon	0.78	0.71	0.74	1.80	4.64	5.83	5.61
Washington	0.59	0.60	0.65	1.55	4.33	5.54	5.38

a. Excludes sales for resale and revenues from sales for resale.
b. Not available.

TABLE 9-4
GAS UTILITY INDUSTRY RESALE PRICES, BY STATE, 1970-1985[a]

($/MMBtu)

Division and State	1970	1975	1980	1982	1983	1984[R]	1985
United States	**$0.35**	**$0.80**	**$2.41**	**$3.60**	**$4.04**	**$3.89**	**$3.82**
New England	**0.62**	**1.41**	**2.84**	**4.33**	**4.35**	**3.87**	**4.10**
Connecticut	0.63	1.51	2.91	4.37	4.39	3.87	4.11
Maine	b	b	b	b	b	b	b
Massachusetts	0.61	1.35	2.81	4.31	4.34	3.87	4.09
New Hampshire	0.62	0.99	2.59	4.18	4.76	3.99	4.38
Rhode Island	0.59	1.59	2.94	4.41	4.24	3.83	4.03
Vermont	b	0.67	b	b	b	b	b
Middle Atlantic	**0.43**	**0.93**	**2.49**	**3.71**	**4.05**	**3.88**	**3.95**
New Jersey	0.44	0.99	2.45	3.66	3.66	3.67	3.71
New York	0.46	0.93	2.59	3.77	4.13	4.00	4.02
Pennsylvania	0.41	0.90	2.45	3.70	4.24	3.91	4.04
East North Central	**0.37**	**0.79**	**2.41**	**3.42**	**4.07**	**3.92**	**3.91**
Illinois	0.31	0.68	2.12	3.00	3.53	3.47	3.51
Indiana	0.37	0.72	2.14	3.24	4.23	4.03	4.02
Michigan	0.40	0.87	2.93	3.93	4.42	4.17	4.46
Ohio	0.39	0.84	2.39	3.61	4.44	4.28	4.13
Wisconsin	0.41	0.95	3.07	4.14	4.46	4.25	4.11
West North Central	**0.34**	**0.70**	**2.11**	**3.51**	**4.11**	**3.87**	**3.64**
Iowa	0.39	0.78	2.48	3.38	3.94	3.95	3.82
Kansas	0.26	0.53	1.78	3.29	3.77	3.37	2.98
Minnesota	0.37	0.75	2.32	3.73	4.37	4.23	3.93
Missouri	0.32	0.69	1.86	3.54	4.12	3.73	3.43
Nebraska	0.34	0.69	2.02	3.38	4.28	4.00	4.00
North Dakota	0.42	1.40	4.55	4.66	4.38	4.41	4.16
South Dakota	0.37	0.72	2.11	3.68	4.35	4.32	4.07
South Atlantic	**0.39**	**0.80**	**2.64**	**3.73**	**4.30**	**4.18**	**4.35**
Delaware	0.62	0.98	2.41	3.77	4.43	4.32	4.59
District of Columbia	b	b	b	b	b	b	b
Florida	0.38	0.66	2.31	3.31	3.38	3.30	3.31
Georgia	0.37	0.69	2.30	3.66	4.00	4.07	4.24
Maryland	0.45	1.05	2.61	4.04	4.85	4.75	4.40
North Carolina	0.24	0.81	2.66	3.68	4.16	4.21	4.17
South Carolina	0.45	0.68	2.32	3.68	4.04	4.07	4.11
Virginia	0.42	0.98	2.60	3.77	4.63	4.46	4.65
West Virginia	0.36	0.76	2.35	3.75	4.63	4.26	5.97
East South Central	**0.32**	**0.64**	**2.15**	**3.50**	**3.93**	**3.60**	**3.87**
Alabama	0.33	0.64	2.25	3.61	3.89	3.88	3.99
Kentucky	0.37	0.71	2.23	3.47	4.19	3.86	3.86
Mississippi	0.27	0.62	2.19	3.64	4.08	3.68	3.86
Tennessee	0.29	0.61	2.04	3.38	3.75	3.33	3.80
West South Central	**0.21**	**0.63**	**2.15**	**3.46**	**3.70**	**3.67**	**3.46**
Arkansas	0.30	0.58	2.17	2.89	3.31	3.02	2.91
Louisiana	0.22	0.62	2.09	3.45	3.78	3.71	3.60
Oklahoma	0.20	0.62	2.05	3.28	3.57	3.41	3.10
Texas	0.20	0.64	2.21	3.51	3.68	3.71	3.45
Mountain	**0.32**	**0.71**	**2.37**	**3.53**	**3.88**	**3.86**	**3.54**
Arizona	0.33	0.70	2.26	3.43	3.84	3.83	3.47
Colorado	0.26	0.58	2.51	3.82	4.14	3.85	3.63
Idaho	0.34	1.14	3.43	4.21	4.01	3.93	3.68
Montana	0.46	0.95	3.42	4.42	4.47	4.39	4.12
Nevada	0.51	1.28	3.64	4.65	5.38	5.20	4.96
New Mexico	0.20	0.48	1.91	2.71	3.07	3.78	2.98
Utah	0.20	0.42	1.83	4.44	4.71	4.49	3.66
Wyoming	0.23	0.97	3.03	4.01	3.97	4.28	4.35
Pacific	**0.34**	**1.10**	**3.39**	**4.39**	**4.33**	**4.14**	**3.56**
Alaska	b	b	0.83	b	b	b	b
California	0.37	0.85	2.75	3.85	4.24	4.10	3.95
Hawaii	b	b	b	b	b	b	b
Oregon	0.30	1.27	4.29	5.06	4.56	4.32	3.39
Washington	0.32	1.11	3.40	4.24	4.01	3.90	3.60

a. Resale prices approximate city-gate prices.
b. No sales reported.
R–Revised.

TABLE 9-5
AVERAGE GAS PRICES OF WELLHEAD, CITY GATE, AND END-USER LEVEL
1960-1985

Year	Wellhead ($/Mcf[b])	City Gate[a] ($/MMBtu[b])	Cost to the Ultimate Customer ($/MMBtu[b])
1960	$0.140	$0.342	$0.605
1961	0.151	0.357	0.618
1962	0.155	0.360	0.630
1963	0.158	0.351	0.625
1964	0.154	0.342	0.615
1965	0.156	0.339	0.618
1966	0.157	0.333	0.612
1967	0.160	0.330	0.612
1968	0.164	0.328	0.607
1969	0.167	0.334	0.616
1970	0.171	0.354	0.641
1971	0.182	0.389	0.681
1972	0.186	0.429	0.730
1973	0.216	0.463	0.788
1974	0.304	0.573	0.953
1975	0.445	0.798	1.285
1976	0.580	0.984	1.599
1977	0.790	1.308	1.974
1978	0.905	1.466	2.184
1979	1.178	1.812	2.522
1980	1.588	2.414	3.134
1981	1.982	2.885	3.650
1982	2.457	3.598	4.456
1983	2.593	4.041	5.121
1984[R]	2.655	3.890	5.128
1985	2.480	3.821	5.017

a. Resale prices approximate city-gate prices. See Table 9-4.
b. Mcf and MMBtu prices are roughly comparable. On a MMBtu basis, the wellhead price would be slightly less.
R–Revised.
Source: For wellhead price, *Monthly Energy Review.*

TABLE 9-6
GAS UTILITY INDUSTRY AVERAGE PRICES, BY STATE AND CLASS OF SERVICE, 1985

($/MMBtu)

Division and State	Total	Class of Service				
		Residential	Commercial	Industrial	Electric Generation	Other
United States	**$5.02**	**$5.95**	**$5.44**	**$4.25**	**$3.81**	**$4.79**
New England	**6.57**	**7.90**	**6.86**	**5.23**	**3.54**	**5.85**
Connecticut	7.28	8.89	6.61	5.38	a	7.61
Maine	7.44	8.80	7.77	6.17	a	a
Massachusetts	6.29	7.61	6.94	5.10	3.54	5.76
New Hampshire	6.70	7.26	6.73	4.96	a	6.62
Rhode Island	6.78	7.80	7.42	5.46	3.57	5.61
Vermont	5.71	6.53	6.12	4.98	a	5.52
Middle Atlantic	**4.31**	**7.17**	**6.27**	**5.08**	**3.92**	**5.97**
New Jersey	6.41	7.28	6.42	5.21	4.05	5.25
New York	6.57	7.62	6.34	5.23	3.86	6.00
Pennsylvania	5.94	6.52	6.08	4.91	4.66	5.88
East North Central	**5.27**	**5.74**	**5.19**	**4.53**	**4.91**	**4.97**
Illinois	5.05	5.37	4.85	4.58	5.17	5.23
Indiana	4.72	5.49	5.00	3.99	4.14	4.62
Michigan	5.66	6.03	5.56	4.97	4.96	5.31
Ohio	5.47	5.82	5.38	4.69	4.86	5.04
Wisconsin	5.36	6.39	5.20	4.48	4.17	4.55
West North Central	**4.61**	**5.24**	**4.74**	**3.83**	**3.18**	**3.39**
Iowa	4.61	5.32	4.82	3.87	3.82	4.43
Kansas	3.77	4.12	3.63	3.69	2.89	2.72
Minnesota	5.09	5.75	5.38	4.09	3.90	5.71
Missouri	4.98	5.47	5.03	3.79	3.26	3.78
Nebraska	4.33	4.97	4.28	3.63	3.50	3.48
North Dakota	5.28	5.59	5.09	4.45	b	b
South Dakota	5.07	5.62	5.01	4.07	b	b
South Atlantic	**5.29**	**6.71**	**5.81**	**4.49**	**3.33**	**4.87**
Delaware	5.53	6.80	6.24	4.73	3.99	b
District of Columbia	7.35	7.96	6.90	a	a	a
Florida	3.91	7.33	5.12	3.71	3.32	3.59
Georgia	5.31	6.44	5.55	4.41	4.21	5.28
Maryland	6.59	7.14	6.32	5.51	b	4.41
North Carolina	5.35	6.41	5.69	4.75	b	6.06
South Carolina	5.08	6.53	5.58	4.56	4.50	5.29
Virginia	5.93	7.07	6.16	4.51	a	6.65
West Virginia	5.65	5.97	5.60	5.06	4.48	b
East South Central	**4.55**	**5.47**	**5.03**	**4.08**	**2.81**	**4.33**
Alabama	4.81	6.24	5.27	4.05	4.05	4.79
Kentucky	4.90	5.27	5.08	4.35	a	4.65
Mississippi	3.93	5.33	4.99	3.84	2.81	4.26
Tennessee	4.51	4.96	4.85	3.12	b	3.63
West South Central	**3.89**	**5.23**	**4.68**	**3.42**	**3.48**	**4.19**
Arkansas	3.92	4.35	4.07	3.63	3.61	3.51
Louisiana	3.92	5.48	5.24	3.11	3.57	3.78
Oklahoma	3.71	4.45	4.28	3.23	2.75	4.19
Texas	3.91	5.59	4.83	3.53	3.49	4.46
Mountain	**4.66**	**5.29**	**4.87**	**3.78**	**3.63**	**4.35**
Arizona	4.81	6.66	5.20	4.24	3.59	4.57
Colorado	4.74	5.11	4.61	4.10	3.62	4.22
Idaho	5.19	6.56	5.42	4.32	a	a
Montana	4.64	4.51	4.79	4.95	0.76	4.43
Nevada	5.46	6.55	5.70	4.27	4.21	5.01
New Mexico	4.70	5.69	4.81	3.87	3.41	4.26
Utah	4.00	4.52	4.62	3.03	3.83	b
Wyoming	4.28	4.97	4.78	3.24	4.60	2.90
Pacific	**5.08**	**5.56**	**6.16**	**4.80**	**4.40**	**5.44**
Alaska	2.24	2.85	2.47	a	1.69	a
California	5.09	5.51	6.42	4.80	4.48	5.50
Hawaii	14.20	17.69	12.07	13.81	a	a
Oregon	5.61	6.73	6.11	4.64	a	a
Washington	5.38	6.44	5.77	4.64	b	5.06

a. No sales reported.
b. Less than 0.05 trillion Btu in sales.

TABLE 9-7
AVERAGE RESIDENTIAL GAS PRICES, BY STATE, 1960-1985

($/MMBtu)

Division and State	1960	1965	1970	1975	1980	1984[R]	1985
United States	**$1.00**	**$1.01**	**$1.06**	**$1.69**	**$ 3.61**	**$ 5.94**	**$ 5.95**
New England	**2.08**	**1.89**	**1.88**	**3.22**	**5.48**	**7.80**	**7.90**
Connecticut	2.02	1.83	1.93	3.27	5.73	8.66	8.89
Maine	3.01	3.33	2.89	4.25	6.35	9.40	8.80
Massachusetts	2.11	1.91	1.87	3.20	5.41	7.64	7.61
New Hampshire	1.99	1.85	1.77	2.46	4.55	7.21	7.26
Rhode Island	1.92	1.80	1.76	3.16	5.48	7.17	7.80
Vermont	3.40	3.44	1.78	2.80	6.43	6.55	6.53
Middle Atlantic	**1.32**	**1.31**	**1.34**	**2.36**	**4.45**	**7.03**	**7.17**
New Jersey	1.79	1.69	1.62	2.59	4.89	7.07	7.28
New York	1.42	1.35	1.38	2.43	4.86	7.49	7.62
Pennsylvania	1.08	1.10	1.17	1.90	3.76	6.43	6.52
East North Central	**0.93**	**0.95**	**0.99**	**1.56**	**3.37**	**5.60**	**5.74**
Illinois	1.11	1.02	1.02	1.58	3.46	5.17	5.37
Indiana	0.98	0.96	1.05	1.45	3.12	5.59	5.49
Michigan	0.94	0.97	1.00	1.60	3.15	5.67	6.03
Ohio	0.76	0.83	0.89	1.51	3.45	5.86	5.82
Wisconsin	1.27	1.14	1.21	1.71	3.80	6.45	6.39
West North Central	**0.83**	**0.85**	**0.92**	**1.37**	**3.08**	**5.47**	**5.24**
Iowa	0.93	0.92	0.96	1.41	3.20	5.46	5.32
Kansas	0.57	0.60	0.69	0.97	2.37	4.47	4.12
Minnesota	1.11	1.05	1.08	1.59	3.24	5.95	5.75
Missouri	0.79	0.84	0.93	1.45	3.37	5.77	5.47
Nebraska	0.85	0.83	0.86	1.26	2.71	4.96	4.97
North Dakota	0.84	0.86	1.05	1.50	3.83	6.38	5.59
South Dakota	0.93	0.95	1.04	1.40	3.11	5.98	5.62
South Atlantic	**1.22**	**1.23**	**1.23**	**2.02**	**4.18**	**6.66**	**6.71**
Delaware	1.72	1.59	1.50	2.36	4.15	6.44	6.80
District of Columbia	1.53	1.47	1.44	2.40	4.56	8.13	7.96
Florida	2.76	2.51	1.81	2.78	4.85	7.02	7.33
Georgia	0.97	1.03	0.98	1.75	4.06	6.26	6.44
Maryland	1.48	1.39	1.43	2.31	4.40	7.33	7.14
North Carolina	1.41	1.38	1.29	2.02	4.00	6.43	6.41
South Carolina	1.43	1.39	1.34	2.08	4.13	6.55	6.53
Virginia	1.55	1.45	1.42	2.29	4.24	6.95	7.07
West Virginia	0.79	0.80	0.87	1.47	3.62	5.81	5.97
East South Central	**0.90**	**0.91**	**0.92**	**1.43**	**3.37**	**5.39**	**5.47**
Alabama	1.06	1.11	1.10	1.72	4.10	6.14	6.24
Kentucky	0.78	0.80	0.84	1.30	3.08	5.15	5.27
Mississippi	0.88	0.87	0.88	1.41	3.39	5.41	5.33
Tennessee	0.94	0.90	0.89	1.33	2.94	4.89	4.96
West South Central	**0.70**	**0.77**	**0.85**	**1.25**	**3.00**	**5.28**	**5.23**
Arkansas	0.66	0.75	0.78	1.12	2.36	4.29	4.35
Louisiana	0.64	0.72	0.75	1.32	3.07	5.77	5.48
Oklahoma	0.69	0.75	0.80	1.15	2.38	4.44	4.45
Texas	0.73	0.80	0.92	1.47	3.30	5.64	5.59
Mountain	**0.72**	**0.74**	**0.83**	**1.34**	**3.23**	**5.45**	**5.29**
Arizona	0.97	1.04	1.14	1.83	3.74	6.83	6.66
Colorado	0.67	0.67	0.71	1.16	3.21	5.25	5.11
Idaho	1.26	1.22	1.34	2.25	4.94	6.60	6.56
Montana	0.60	0.63	0.84	1.18	2.88	4.60	4.51
Nevada	1.47	1.30	1.31	1.81	3.97	6.54	6.55
New Mexico	0.74	0.71	0.84	1.37	3.21	5.59	5.69
Utah	0.63	0.64	0.70	1.12	2.68	4.92	4.52
Wyoming	0.59	0.61	0.65	0.99	2.94	5.28	4.97
Pacific	**0.91**	**0.91**	**0.97**	**1.58**	**3.81**	**5.68**	**5.56**
Alaska	a	1.48	1.42	1.48	1.73	2.66	2.85
California	0.88	0.87	0.93	1.52	3.38	5.63	5.51
Hawaii	3.65	3.74	3.56	7.97	14.58	17.81	17.69
Oregon	1.56	1.52	1.44	2.41	5.36	6.93	6.73
Washington	1.41	1.32	1.29	2.12	4.91	6.51	6.45

a. Not available.
R–Revised.

TABLE 9-8
AVERAGE ANNUAL RESIDENTIAL GAS BILLS, BY STATE, 1960-1985

($/Customer)

Division and State	1960	1965	1970	1975	1980	1984	1985
United States	**$104**	**$117**	**$137**	**$206**	**$401**	**$606**	**$585**
New England	**103**	**128**	**162**	**274**	**493**	**696**	**702**
Connecticut	109	125	169	285	505	752	762
Maine	88	107	110	165	274	416	390
Massachusetts	106	132	163	276	494	683	684
New Hampshire	102	137	165	234	444	708	688
Rhode Island	91	117	146	286	474	666	696
Vermont	68	80	116	261	661	618	687
Middle Atlantic	**103**	**119**	**144**	**231**	**458**	**710**	**688**
New Jersey	102	124	150	229	439	642	640
New York	90	105	126	217	441	694	663
Pennsylvania	127	142	172	257	501	790	736
East North Central	**128**	**151**	**174**	**257**	**535**	**803**	**787**
Illinois	122	143	169	266	562	813	792
Indiana	101	128	168	220	449	731	673
Michigan	138	168	189	268	545	829	879
Ohio	140	157	172	259	547	828	766
Wisconsin	117	148	175	238	497	736	744
West North Central	**126**	**135**	**154**	**209**	**405**	**653**	**615**
Iowa	138	148	161	215	408	645	619
Kansas	90	93	114	145	301	510	457
Minnesota	161	176	190	255	450	748	743
Missouri	118	127	155	215	449	682	617
Nebraska	136	134	145	195	350	611	588
North Dakota	100	142	179	245	489	770	696
South Dakota	135	150	159	203	365	685	651
South Atlantic	**113**	**118**	**136**	**196**	**386**	**586**	**524**
Delaware	110	136	164	219	388	580	552
District of Columbia	122	129	147	230	472	839	719
Florida	54	68	87	107	194	262	238
Georgia	107	106	122	181	393	579	526
Maryland	125	133	158	225	425	698	607
North Carolina	110	124	144	188	388	571	491
South Carolina	98	105	122	151	319	443	380
Virginia	129	137	157	230	423	653	596
West Virginia	129	128	140	219	473	700	650
East South Central	**106**	**101**	**116**	**153**	**345**	**510**	**465**
Alabama	103	101	118	157	356	501	460
Kentucky	120	116	132	177	401	598	549
Mississippi	86	77	92	122	291	429	393
Tennessee	111	103	113	140	299	475	423
West South Central	**68**	**71**	**89**	**130**	**283**	**423**	**392**
Arkansas	81	85	103	128	226	432	379
Louisiana	56	59	72	108	236	428	362
Oklahoma	79	87	102	138	246	451	424
Texas	67	69	89	135	265	413	394
Mountain	**99**	**104**	**117**	**178**	**336**	**531**	**498**
Arizona	73	80	89	141	221	360	363
Colorado	100	103	111	171	385	564	509
Idaho	127	143	154	249	393	513	534
Montana	106	126	148	203	363	538	558
Nevada	130	134	148	204	347	470	480
New Mexico	99	96	109	173	318	516	480
Utah	127	128	148	201	373	702	610
Wyoming	102	106	117	160	378	665	610
Pacific	**84**	**94**	**103**	**174**	**286**	**393**	**420**
Alaska	a	341	282	328	375	522	586
California	82	92	97	166	272	378	405
Hawaii	92	102	120	232	364	362	360
Oregon	123	138	163	258	428	542	562
Washington	132	152	165	259	469	570	605

a. Not available.

TABLE 9-9
AVERAGE RESIDENTIAL CONSUMPTION AND COSTS 1960-1985[a]

Year	Gas			Electric Price ($/MMBtu)	Number 2 Fuel Oil Price ($/MMBtu)
	Consumption (MMBtu/Customer)	Annual Bill ($/Customer)	Price ($/MMBtu)		
1960	104.8	$104.46	$1.00	$ 7.24	$1.08
1961	106.7	108.51	1.02	7.18	1.12
1962	110.9	112.98	1.02	7.06	1.13
1963	112.1	113.96	1.02	6.95	1.15
1964	115.3	116.09	1.01	6.77	1.12
1965	116.5	117.34	1.01	6.59	1.15
1966	118.8	119.38	1.00	6.45	1.18
1967	121.5	122.03	1.00	6.36	1.21
1968	124.1	124.48	1.00	6.21	1.25
1969	128.4	130.08	1.01	6.13	1.28
1970	129.2	136.69	1.06	6.15	1.33
1971	129.9	145.28	1.12	6.42	1.41
1972	130.4	154.56	1.19	6.71	1.42
1973	124.5	155.73	1.25	6.98	1.64
1974	119.6	169.82	1.42	8.29	2.60
1975	121.9	206.24	1.69	9.40	2.81
1976	121.3	240.48	1.98	10.11	3.01
1977	118.7	276.87	2.33	11.08	3.42
1978	121.0	307.40	2.53	11.81	3.66
1979	118.6	346.39	2.92	12.69	5.24
1980	111.0	400.84	3.61	14.45	7.21
1981	104.4	434.43	4.16	17.00	8.95
1982	107.1	531.96	4.97	18.90	8.70
1983	99.1	583.00	5.88	20.01	7.92
1984[R]	102.0	605.80	5.94	20.93	8.08
1985	98.3	584.90	5.95	21.63	7.75

a. Prices given are for total usage.
R–Revised.
Sources: For electric price, Edison Electric Institute *Statistical Yearbook*. For oil price, Bureau of Labor Statistics.

TABLE 9-10
AVERAGE RESIDENTIAL GAS PRICES
BY CENSUS DIVISION
HEATING SEASON—NOVEMBER THRU MARCH

($/MMBtu)

	1979–80	1980–81	1981–82	1982–83	1983–84	1984–85	1985–86[a]
Total U.S.	$3.28	$3.84	$4.52	$5.56	$5.71	$5.81	$5.54
NE	4.98	5.71	7.04	8.39	7.47	7.70	7.41
MA	3.94	4.67	5.42	6.02	6.65	6.87	6.75
ENC	3.14	3.52	4.12	5.12	5.47	5.59	5.27
WNC	2.75	3.46	4.35	5.35	5.27	5.18	4.82
SA	3.92	4.27	5.17	6.12	6.46	6.46	6.35
ESC	3.09	3.57	4.28	5.38	5.22	5.34	5.08
WSC	2.91	3.23	3.97	4.87	5.00	4.99	4.83
M	2.98	3.79	4.48	5.13	5.21	5.20	5.01
P	2.98	3.59	3.91	4.98	5.46	5.68	5.54

a. Data used for 1986 was based on the *Quarterly Report of Gas Industry Operations.*

TABLE 9-11
AVERAGE GAS CONSUMPTION BY HOUSEHEATING CUSTOMERS
BY CENSUS DIVISION
HEATING SEASON—NOVEMBER THRU MARCH

(MMBtu/Customer)

	1979–80	1980–81	1981–82	1982–83	1983–84	1984–85	1985–86[a]
Total U.S.	83.3	81.4	81.8	70.7	78.2	75.3	72.9
NE	93.9	92.5	88.8	75.2	85.2	80.6	84.8
MA	107.4	113.6	111.3	89.8	101.7	95.4	97.2
ENC	112.9	115.1	116.1	92.2	108.7	101.3	103.4
WNC	105.3	87.5	93.4	77.8	89.1	87.4	86.5
SA	71.0	74.1	69.9	60.6	67.5	60.7	61.6
ESC	75.1	71.5	68.7	60.3	70.1	64.2	60.3
WSC	53.7	55.5	54.4	54.9	60.9	54.5	48.6
M	76.0	59.2	59.4	62.8	64.5	63.9	58.7
P	50.7	45.6	48.3	47.4	41.8	50.3	41.3

a. Data used for 1986 was based on the *Quarterly Report of Gas Industry Operations.*

TABLE 9-12
AVERAGE GAS BILL FOR HOUSEHEATING CUSTOMERS
BY CENSUS DIVISION
HEATING SEASON—NOVEMBER THRU MARCH

($/Customer)

	1979–80	1980–81	1981–82	1982–83	1983–84	1984–85	1985–86[a]
Total U.S.	$273	$313	$370	$393	$447	$437	$404
NE	468	528	625	631	636	621	628
MA	423	531	603	541	677	656	656
ENC	355	405	478	472	594	567	545
WNC	290	303	406	416	469	453	417
SA	278	316	361	371	436	392	391
ESC	232	255	294	325	366	342	306
WSC	156	179	216	267	304	272	235
M	226	224	266	322	336	332	294
P	151	164	189	236	228	286	208

a. Data used for 1986 was based on the *Quarterly Report of Gas Industry Operations.*

TABLE 9-13
GAS UTILITY INDUSTRY AVERAGE PRICES, FOR GAS USED FOR ELECTRIC GENERATION, BY STATE, 1979-1985

($/MMBtu)

Division and State	1979	1980	1981	1982	1983	1984[R]	1985
United States	**$2.12**	**$2.65**	**$3.24**	**$4.09**	**$4.20**	**$4.22**	**$3.81**
New England	**2.65**	**3.50**	**3.64**	**4.20**	**3.93**	**4.01**	**3.54**
Connecticut	a	a	a	a	a	a	a
Maine	a	a	a	a	a	a	a
Massachusetts	2.69	3.53	3.74	4.21	3.95	4.02	3.54
New Hampshire	a	a	a	a	a	a	a
Rhode Island	2.49	3.39	3.35	4.09	3.69	3.86	3.57
Vermont	a	a	a	a	a	a	a
Middle Atlantic	**1.69**	**3.004**	**3.74**	**4.36**	**4.41**	**4.23**	**3.92**
New Jersey	2.84	3.115	3.88	4.59	4.38	4.35	4.05
New York	2.36	3.330	3.84	5.42	6.57	4.18	3.86
Pennsylvania	2.58	2.777	3.38	3.58	4.89	5.04	4.66
East North Central	**2.33**	**2.997**	**3.63**	**4.31**	**4.83**	**4.73**	**4.91**
Illinois	2.61	3.220	3.98	4.33	4.98	4.90	5.17
Indiana	2.26	2.668	3.05	3.54	4.28	4.17	4.14
Michigan	2.10	2.863	3.40	4.34	4.65	4.65	4.96
Ohio	2.24	2.803	3.32	4.23	5.05	5.59	4.86
Wisconsin	2.29	2.809	3.43	4.27	4.42	4.17	4.17
West North Central	**1.43**	**1.990**	**2.25**	**2.83**	**3.47**	**3.36**	**3.18**
Iowa	2.00	2.402	3.10	3.71	3.84	3.86	3.82
Kansas	1.45	1.863	2.12	2.64	3.33	3.16	2.89
Minnesota	1.80	2.002	2.62	3.41	3.86	3.94	3.90
Missouri	1.43	2.315	2.77	3.99	4.42	3.81	3.26
Nebraska	1.17	1.814	2.37	3.13	3.30	3.40	3.50
North Dakota	a	b	b	b	b	b	b
South Dakota	1.45	a	a	a	a	b	b
South Atlantic	**2.16**	**2.214**	**2.84**	**3.22**	**3.19**	**3.43**	**3.33**
Delaware	a	a	a	a	a	a	3.99
District of Columbia	a	a	a	a	a	a	a
Florida	2.15	2.211	2.81	3.20	3.16	3.42	3.32
Georgia	2.17	2.518	3.32	3.87	4.06	4.31	4.21
Maryland	a	a	4.27	4.22	a	a	b
North Carolina	2.82	3.317	4.55	4.02	4.69	4.76	b
South Carolina	2.92	3.117	4.20	4.22	4.44	a	4.50
Virginia	a	a	a	a	a	a	a
West Virginia	a	3.114	4.04	3.93	4.47	4.92	4.48
East South Central	**1.91**	**2.279**	**2.76**	**3.19**	**3.57**	**2.88**	**2.81**
Alabama	a	b	b	b	b	3.69	4.05
Kentucky	a	a	a	a	a	a	a
Mississippi	1.91	2.279	2.76	3.19	3.57	2.88	2.81
Tennessee	a	2.313	2.84	b	a	3.48	b
West South Central	**2.14**	**2.317**	**2.96**	**3.83**	**3.93**	**3.88**	**3.48**
Arkansas	1.74	1.773	2.14	3.18	3.52	3.69	3.61
Louisiana	2.03	2.319	3.03	3.53	3.78	3.66	3.57
Oklahoma	1.61	1.812	1.94	2.80	3.16	2.79	2.75
Texas	2.13	2.418	3.13	3.97	3.98	3.92	3.49
Mountain	**2.06**	**2.444**	**2.93**	**3.63**	**3.84**	**4.02**	**3.63**
Arizona	1.88	2.216	2.92	3.63	3.38	4.04	3.59
Colorado	2.00	2.613	3.28	3.80	4.28	3.89	3.62
Idaho	a	a	a	a	a	a	a
Montana	a	1.913	b	b	b	5.41	0.76
Nevada	2.36	2.612	3.08	4.16	4.84	4.54	4.21
New Mexico	1.97	2.340	2.65	3.28	3.53	3.68	3.41
Utah	1.53	a	a	a	a	a	3.83
Wyoming	a	a	a	a	a	a	4.60
Pacific	**2.40**	**3.415**	**3.91**	**4.95**	**4.98**	**4.99**	**4.40**
Alaska	0.85	0.818	1.19	95	1.43	1.57	1.69
California	2.44	3.513	3.96	5.07	5.11	5.09	4.48
Hawaii	a	a	a	a	a	a	a
Oregon	a	4.880	5.54	b	b	b	a
Washington	3.05	a	4.77	7.54	b	a	b

a. No sales reported.
b. Less than 0.05 trillion Btu in sales.
R–Revised.

TABLE 9-15
INDEXES OF WHOLESALE PRICES OF GAS, YEARLY AVERAGES, 1960-1985 AND MONTHLY AVERAGES, 1985

(1967 = 100)

Year and Month	All Gas	Utility Gas	Liquefied Petroleum Gas
1960	87.2	90.5	73.2
1961	88.8	94.9	58.7
1962	89.2	96.8	52.2
1963	91.8	97.5	69.6
1964	90.7	97.7	56.5
1965	92.8	97.8	69.2
1966	96.7	98.6	89.1
1967	100.0	100.0	100.0
1968	91.3	101.9	60.2
1969	93.1	103.0	63.7
1970	103.0	105.6	96.3
1971	108.0	112.2	95.7
1972	114.1	121.0	93.7
1973	126.7	131.3	113.2
1974	162.2	154.6	183.5
1975	216.7	215.3	221.0
1976	286.8	291.8	287.7
1977	387.8	412.3	367.9
1978	428.6	488.2	343.5
1979	544.4	637.6	406.9
1980	760.4	846.6	642.2
1981	939.8	1,099.1	703.6
1982	1,060.8	1,338.1	628.0
1983	1,147.9	1,426.9	714.5
1984	1,109.0	1,419.6	622.4
1985	1,047.0	1,376.4	541.9
January	1,073.0	1,389.5	578.7
February	1,067.2	1,415.9	531.6
March	1,043.6	1,378.0	528.2
April	1,049.3	1,386.5	529.9
May	1,078.7	1,433.2	534.5
June	1,005.1	1,406.2	523.9
July	1,049.9	1,397.6	515.8
August	1,025.5	1,362.1	509.0
September	1,030.8	1,361.4	524.8
October	1,033.3	1,357.1	538.8
November	1,024.0	1,324.2	569.0
December	1,030.2	1,305.1	618.4

Source: Bureau of Labor Statistics, *Producer Prices and Price Index*, 1985. Represents unofficial estimates of U.S. Bureau of Labor Statistics, based on wellhead prices for natural gas by 20 major pipeline companies, and L.P.G. price quotations from 2 major producers.

SECTION 10
ENERGY CONSUMPTION

	1985	% Change 85/84
Average Annual Consumption		
(Millions of Btu per Customer)		
Total	252.5	− 5.4
Residential	98.3	− 3.6
Commercial	612.7	− 4.6
Industrial	31,470.5	− 5.4
Other	2,739.8	−11.5

TABLE 10-1
ANNUAL CONSUMPTION OF ENERGY RESOURCES IN THE UNITED STATES, BY MAJOR SOURCES, BY CONSUMING SECTORS, 1978–1985[a]

(Trillions of Btu)

Consuming Sectors	Coal and Coke	Natural gas dry[b]	Petroleum[c]	Hydropower[d]	Nuclear power[d]	Other[e]	Total gross energy inputs[f]	Utility electricity purchased[g]	Total Sector energy inputs
Household and commercial:									
1978[R]	214	7,624	4,070	—	—	—	11,908	4,116	16,024
1979[R]	187	7,891	3,448	—	—	—	11,526	4,184	15,710
1980[R]	145	7,539	3,035	—	—	—	10,719	4,355	15,074
1981[R]	168	7,242	2,634	—	—	—	10,044	4,497	14,541
1982[R]	188	7,433	2,449	—	—	—	10,070	4,566	14,636
1983[R]	196	7,025	2,499	—	—	—	9,720	4,680	14,400
1984[R]	212	7,292	2,582	—	—	—	10,086	4,894	14,980
1985[P]	181	7,049	2,598	—	—	—	9,828	5,057	14,885
Industrial:									
1978[R]	3,419[h]	8,539	9,890	32	—	—	21,900	2,761	24,661
1979[R]	3,656[h]	8,549	10,576	34	—	—	22,815	2,873	25,688
1980[R]	3,120[h]	8,394	9,524	33	—	—	21,071	2,781	23,852
1981[R]	3,141[h]	8,257	8,295	33	—	—	19,726	2,817	22,543
1982[R]	2,530[h]	7,116	7,798	33	—	—	17,477	2,542	20,019
1983[R]	2,474[h]	6,821	7,421	33	—	—	16,749	2,648	19,397
1984[R]	2,831[h]	7,448	7,889	33	—	—	18,201	2,868	21,069
1985[P]	2,744[h]	7,087	7,718	33	—	—	17,582	2,813	20,395
Transportation:[i]									
1978	—	539	20,019	—	—	—	20,558	9	20,567
1979	—	612	19,817	—	—	—	20,429	10	20,439
1980	—	648	19,009	—	—	—	19,657	11	19,668
1981	—	657	18,800	—	—	—	19,457	11	19,468
1982	—	613	18,417	—	—	—	19,030	11	19,041
1983[R]	—	504	18,591	—	—	—	19,095	11	19,106
1984[R]	—	545	19,295	—	—	—	19,840	11	19,851
1985[P]	—	523	19,445	—	—	—	19,968	12	19,980
Electricity generation, utilities:									
1978	10,238	3,297	3,987	3,110	3,024	68	23,724	(6,886)	—
1979	11,260	3,613	3,283	3,107	2,776	89	24,128	(7,067)	—
1980	12,123	3,810	2,634	3,085	2,739	114	24,505	(7,147)	—
1981	12,583	3,768	2,202	3,072	3,008	127	24,760	(7,325)	—
1982	12,582	3,342	1,568	3,528	3,131	108	24,259	(7,119)	—
1983[R]	13,213	2,998	1,544	3,838	3,203	133	24,930	(7,339)	—
1984[R]	14,020	3,220	1,286	3,741	3,538	174	25,980	(7,773)	—
1985[P]	14,549	3,151	1,090	3,340	4,144	213	26,486[h]	(7,882)	—
Unaccounted for:									
1978[R]	—	—	—	—	—	—	—	—	—
1979[R]	—	—	—	—	—	—	—	—	—
1980	—	—	—	—	—	—	—	—	—
1981[R]	—	—	—	—	—	—	—	—	—
1982	—	3	—	—	—	—	3	—	3
1983[R]	(1)	4	(1)	—	—	—	1	—	1
1984[R]	—	—	—	—	—	—	—	—	—
1985[P]	—	3	—	—	—	—	3	—	3
Total gross energy inputs:									
1978[R]	13,890	20,000	37,965	3,141	3,024	68	78,088	—	61,252
1979[R]	15,102	20,666	37,123	3,141	2,776	89	78,898	—	61,837
1980[R]	15,388	20,391	34,202	3,118	2,739	114	75,952	—	58,594
1981[R]	15,892	19,926	31,931	3,105	3,008	127	73,989	—	56,552
1982[R]	15,300	18,507	30,232	3,561	3,131	108	70,840	—	51,696
1983[R]	15,882	17,352	30,054	3,871	3,203	133	70,495	—	52,903
1984[R]	17,063	18,507	31,051	3,774	3,538	174	74,108	—	55,900
1985[P]	17,474	17,813	30,852	3,372	4,144	213	73,867	—	55,260

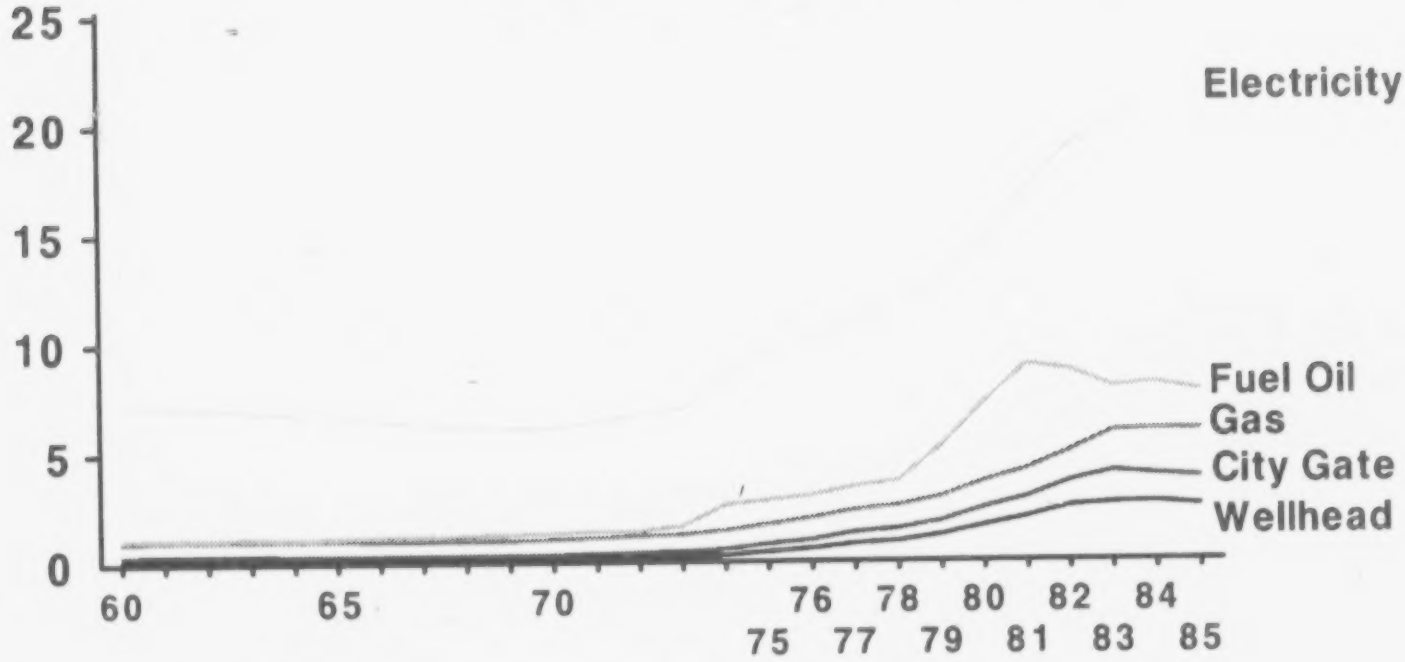
a. Gross energy is the total of inputs into the economy of the primary fuels (including imports) or their derivatives, plus the generation of hydro, nuclear power and other (converted to equivalent energy inputs).
b. Excludes natural gas liquids.
c. Petroleum products including still gas, liquefied refinery gas and natural gas liquids.
d. Outputs and hydropower (adjusted for net imports or net exports) are converted to theoretical energy inputs using 10,445 Btu per net KWH for 1985. Energy input for nuclear power converted at an average heat rate of 10,800 Btu per net KWH. Excludes inputs for power generation by non-utility plants, which are included within the other consuming sectors.
e. Includes geothermal power and electricity produced from wood and waste.
f. Gross energy resource inputs with electricity generation shown as separate consuming sector.
g. Utility electricity generated and imported, distributed to the other consuming sectors as energy resource inputs.
h. Includes net imports of coke of 125 trillion Btu in 1978, 63 trillion Btu in 1979, −35 trillion Btu in 1980, −16 trillion Btu in 1981, −22 trillion Btu in 1982, −16 trillion Btu in 1983, −11 trillion Btu in 1984 and −13 trillion Btu in 1985.
i. Includes bunkers and military transportation.

R–Revised. Note that all years have been revised. P–Preliminary.

Source: Prior to 1977, U.S. Bureau of Mines, 1977 and beyond, U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*.

CHART 9-1

RESIDENTIAL PRICES OF FUELS & ELECTRICITY (DOLLARS / MILLION BTU)



REFERENCE: TABLES 9-5, 9-9

TABLE 9-14
AVERAGE CONSUMER PRICE INDEXES, 1960-1985[a]

(1967 = 100)

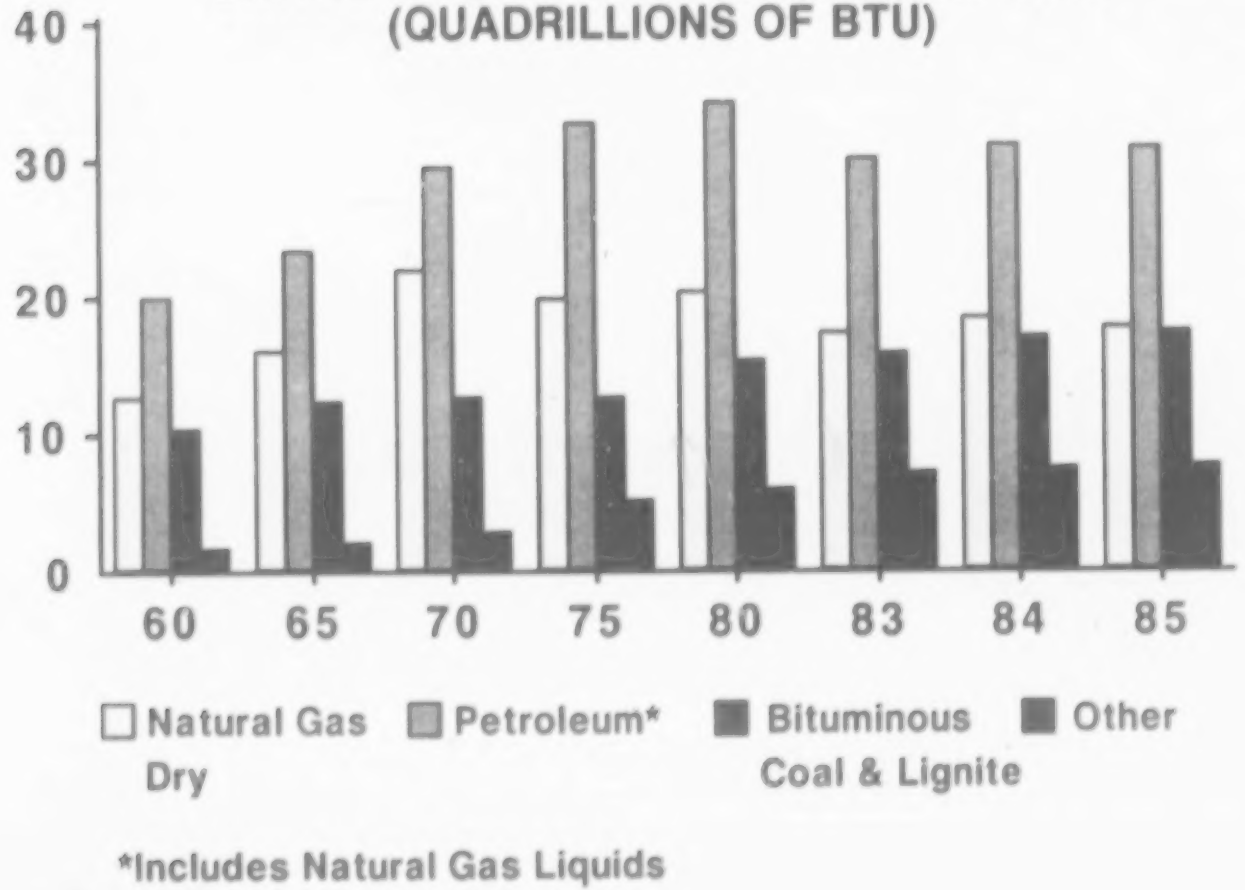
Year	All Items	Total Food	Apparel[b] and Upkeep	Shelter[c]	Gas and Electricity	Fuel Oil[d] and Coal	House Furnishing[e] and Operation	Trans-portation	Medical Care	Personal Care	Reading and Recreation	Other Goods and Services[f]
1960	88.6	88.0	89.6	87.8	98.6	89.2	99.3	89.6	79.1	90.1	87.3	87.8
1961	89.6	89.1	90.2	88.5	99.4	91.0	98.7	90.6	81.4	90.6	89.3	88.5
1962	90.6	89.9	90.5	89.6	99.4	91.5	98.1	92.5	83.5	92.2	91.3	89.1
1963	91.7	91.2	91.9	90.7	99.4	93.2	97.7	93.0	85.6	93.4	92.8	90.6
1964	92.2	92.4	92.7	92.2	99.4	92.7	97.6	94.3	87.3	94.6	95.0	92.0
1965	94.5	94.4	93.7	93.8	99.4	94.6	97.1	95.9	89.5	95.2	94.2	
1966	97.2	99.1	96.1	96.8	99.6	97.0	98.0	97.2	97.1	97.5	97.2	
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	104.2	103.6	105.4	104.8	100.9	103.1	103.9	103.2	106.1	104.2	104.7	104.6
1969	109.8	108.9	111.5	113.3	102.8	105.6	109.0	107.2	113.4	109.3	108.7	110.3
1970	116.3	114.9	116.1	123.6	107.3	110.1	113.4	112.7	120.6	113.2	113.4	116.2
1971	121.3	118.4	119.8	128.8	114.7	117.5	118.1	118.6	128.4	116.8	119.3	122.2
1972	125.3	123.5	122.3	134.5	120.5	118.5	121.0	119.9	132.5	119.8	122.8	126.1
1973	133.1	141.4	126.8	140.7	126.4	136.0	124.9	123.8	137.7	125.2	125.9	129.0
1974	147.7	161.7	136.2	154.4	145.8	214.6	140.5	137.7	150.5	138.3	133.8	137.2
1975	161.2	175.4	142.3	169.7	169.6	235.3	158.1	150.6	168.6	150.7	144.4	147.4
1976	170.5	180.8	147.6	179.0	189.0	250.8	168.5	165.5	184.7	160.5	151.2	153.3
1977	181.5	192.2	154.2	191.1	213.4	283.4	177.0	177.2	202.4	170.9	157.9	159.2
1978	195.3	211.2	159.5	210.3	232.6	298.3	177.0	185.8	219.4	182.0	g	183.2
1979	217.7	234.7	166.4	240.3	257.6	403.6	188.9	212.8	240.1	195.5	g	196.3
1980	247.0	255.3	177.4	283.1	301.2	557.2	202.9	250.5	267.2	212.7	g	213.6
1981	272.4	274.6	186.9	314.7	345.9	675.9	221.3	280.0	294.5	232.0	g	235.7
1982	289.1	285.7	191.8	337.0	393.8	667.9	233.2	291.5	328.7	248.3	g	257.0
1983	298.4	291.7	196.5	344.8	428.7	628.0	238.5	298.4	357.3	261.1	g	288 3
1984	311.1	302.9	200.2	361.7	445.2	641.8	242.5	311.7	379.5	271.4	g	307.7
1985	327.9	309.5	204.5	401.6	466.0	486.6	250.2	308.6	432.0	291.0	g	342.6

a. Applicable to "wage-earners and clerical workers in urban United States."
b. Includes apparel only prior to June 1964.
c. Includes hotel and motel rates.
d. Starting in 1978 includes bottled gas.
e. Includes house furnishings only prior to 1969.
f. Prior to 1978 included alcoholic beverages, now found in food and beverages; now includes personal care and education—related expenses, formerly found in health and recreation.
g. Not available.

Source: Bureau of Labor Statistics. *The Consumer Price Index*, 1985.

CHART 10-1

UNITED STATES ENERGY CONSUMPTION
(QUADRILLIONS OF BTU)



*Includes Natural Gas Liquids

REFERENCE: TABLE 10-1

TABLE 10-2
ANNUAL CONSUMPTION OF FOSSIL ENERGY RESOURCES, AND ELECTRICITY FROM HYDROPOWER AND NUCLEAR POWER, IN THE UNITED STATES, 1960–1985[a]

(Trillions of Btu)

Year	Natural Gas Dry[b,c]	Natural Gas Liquids	Crude Petroleum and Products	Bituminous Coal and Lignite[d]	Anthracite Coal	Hydro-power[e]	Nuclear[e]	Other[f]	Grand Total Energy
1960	12,736	1,427	18,608	9,967	447	1,626	5	g	44,816
1961	13,228	1,498	18,989	9,809	404	1,628	17	g	45,573
1962	14,027	1,586	19,681	10,160	363	1,780	23	g	47,620
1963	14,843	1,703	20,247	10,722	361	1,740	33	g	49,649
1964	15,515	1,772	20,700	11,295	365	1,873	34	g	51,554
1965	16,097	1,853	21,566	12,030	328	2,057	38	g	53,969
1966	17,393	1,989	22,405	12,740	290	2,073	58	g	56,948
1967	18,250	2,043	23,292	11,982	274	2,344	80	g	58,265
1968	19,580	2,239	24,813	12,401	258	2,342	130	g	61,763
1969	21,020	2,459	25,962	12,509	224	2,659	146	g	64,979
1970	22,029	2,494	27,043	12,488	210	2,650	229	g	67,143
1971	22,470	2,496	28,074	11,858	187	2,862	404	g	68,351
1972	22,698	2,706	30,260	12,273	150	2,946	576	g	71,609
1973	22,512	2,652	32,188	12,970	h	3,010	910	46	74,288
1974	21,732	2,565	30,890	12,724	h	3,309	1,272	56	72,548
1975	19,948	2,484	30,247	12,682	h	3,219	1,900	72	70,552
1976	20,345	i	35,175	13,589	h	3,066	2,111	81	74,367
1977	19,931	i	37,122	13,940	h	2,515	2,702	82	76,292
1978	20,000	i	37,965	13,892	h	3,141	3,024	68	78,090
1979	20,666	i	37,123	15,105	h	3,141	2,776	89	78,900
1980	20,391	i	34,202	15,391	h	3,118	2,739	114	75,955
1981	19,926	i	31,931	15,892	h	3,105	3,008	127	73,989
1982[R]	18,507	i	30,232	15,300	h	3,561	3,131	108	70,840
1983[R]	17,352	i	30,054	15,882	h	3,871	3,203	133	70,495
1984[R]	18,507	i	31,051	17,063	h	3,774	3,538	174	74,108
1985[P]	17,813	i	30,852	17,474	h	3,372	4,144	213	73,867

a. Represents production minus exports plus imports, and adjusted for change in inventories.
b. The Btu value per cubic foot for natural gas dry for 1962 and prior years is 1,035; 1963 1,031; 1964, 1965 and 1967 1,032; 1966 1,033; 1968–1971 1,031; 1972 1,027; 1973 1,021; 1974 1,024; 1975 1,021; 1976 1,020; 1977 1,021; 1978 1,019; 1979 1,021; 1980 1,026; 1981 1,027; 1982 1,028; 1983–1985 1,031.
c. Marketed production minus shrinkage caused by liquids extraction.
d. Includes net imports of coke of −7 trillion Btu in 1973, 56 trillion Btu in 1974, 14 trillion Btu in 1975, 15 trillion Btu in 1977, 125 trillion Btu in 1978, 63 trillion Btu in 1979, −35 trillion Btu in 1980, −16 trillion Btu in 1981, −22 trillion Btu in 1982, −16 trillion Btu in 1983, −11 trillion in 1984, and −13 trillion in 1985.
e. See Table 3-1 for procedures used to determine Btu equivalents.
f. Includes energy from geothermal, wood or waste products.
g. Not available.
h. Included in "Bituminous Coal and Lignite."
i. Included in "Crude Petroleum and Products."

R–Revised. P–Preliminary.

Source: Prior to 1977, U.S. Bureau of Mines, 1977 and beyond, U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*.

TABLE 10-3
ANNUAL CONSUMPTION OF FOSSIL ENERGY RESOURCES, AND ELECTRICITY FROM HYDROPOWER AND NUCLEAR POWER, IN THE UNITED STATES, 1960–1985

(Percentage)

Year	Natural Gas Dry	Natural Gas Liquids	Crude Petroleum and Products	Bituminous Coal and Lignite	Anthracite Coal	Hydro-power	Nuclear	Other	Grand Total Energy
1960	28.4	3.2	41.6	22.2	1.0	3.6	a	b	100.0
1965	29.8	3.4	40.0	22.3	0.6	3.8	0.1	b	100.0
1970	32.8	3.7	40.3	18.6	0.3	4.0	0.3	b	100.0
1971	32.9	3.6	41.1	17.3	0.3	4.2	0.6	b	100.0
1972	31.7	3.8	42.3	17.1	0.2	4.1	0.8	b	100.0
1973	30.3	3.6	43.3	17.4	c	4.1	1.2	0.1	100.0
1974	30.0	3.4	42.6	17.5	c	4.6	1.8	0.1	100.0
1975	28.3	3.4	42.9	18.0	c	4.6	2.7	0.1	100.0
1976	27.4	d	47.3	18.3	c	4.1	2.8	0.1	100.0
1977	26.1	d	48.7	18.3	c	3.3	3.5	0.1	100.0
1978	25.6	d	48.6	17.8	c	4.0	3.9	0.1	100.0
1979	26.2	d	47.1	19.1	c	4.0	3.5	0.1	100.0
1980	26.8	d	45.0	20.3	c	4.1	3.6	0.2	100.0
1981	26.9	d	43.2	21.5	c	4.2	4.1	0.2	100.0
1982	26.1	d	42.7	21.6	c	5.0	4.4	0.2	100.0
1983	24.6	d	42.6	22.5	c	5.5	4.6	0.2	100.0
1984	24.5	d	42.1	23.3	c	5.1	4.8	0.2	100.0
1985[P]	24.1	d	41.8	23.7	c	4.5	5.6	0.3	100.0

a. Less than 0.05.
b. Not available.
c. Included in "Bituminous Coal and Lignite."
d. Included in "Crude Petroleum and Products."
P–Preliminary.
Source: Same as Table 10-2.

TABLE 10-4
ENERGY CONSUMPTION PER CAPITA IN THE UNITED STATES, 1960–1985

Year	Total Energy Consumed (Trillions of Btu)	Natural Gas Consumed (Trillions of Btu)	Resident Population (Thousands)	Energy Consumed Per Capita (Millions of Btu)	Natural Gas Consumed Per Capita (Millions of Btu)	Gross National Product (Billions of 1982 $)	Total Energy Per Dollar of GNP (Thousands of Btu / 1982 $)	Index of Industrial Production (1977 = 100)
1960[R]	44,816	12,736	179,992	249	71	1,665.3	26.9	48.8
1965[R]	53,969	16,097	193,815	278	83	2,087.6	25.9	66.1
1970[R]	67,143	22,029	203,302	330	108	2,416.2	27.8	78.5
1971[R]	68,351	22,470	206,827	330	109	2,484.8	27.5	79.6
1972[R]	71,609	22,698	209,284	342	108	2,608.5	27.5	87.3
1973[R]	74,282	22,505	211,357	351	106	2,744.1	27.1	94.4
1974[R]	72,543	21,725	213,342	340	102	2,729.3	26.6	93.0
1975[R]	70,546	19,948	215,465	327	93	2,695.0	26.2	84.8
1976[R]	74,362	20,338	217,563	342	93	2,826.7	26.3	92.6
1977[R]	76,289	19,924	219,760	347	91	2,958.6	25.8	100.0
1978[R]	78,088	20,000	222,095	352	90	3,115.2	25.1	106.5
1979[R]	78,898	20,666	224,567	351	92	3,192.4	24.7	110.7
1980[R]	75,952	20,391	226,505	335	90	3,187.1	23.8	108.6
1981[R]	73,989	19,926	229,307	323	87	3,248.8	22.8	111.0
1982[R]	70,840	18,507	231,507	306	80	3,166.0	22.4	103.1
1983[R]	70,495	17,352	233,974	301	74	3,277.0	21.5	109.2
1984[R]	74,108	18,507	236,636	313	78	3,492.0	21.2	121.8
1985[P]	73,867	17,813	238,872	309	75	3,570.0	20.7	124.5

R–Revised. P–Preliminary.
Source: U.S. Department of Energy, U.S. Bureau of the Census and the Federal Reserve Board.

TABLE 10-5
GAS UTILITY INDUSTRY AVERAGE ANNUAL CONSUMPTION PER CUSTOMER, BY CLASS OF SERVICE, 1960-1985[a]

(MMBtu/Customer)

Year	Total	Residential	Commercial	Industrial[b]	Other[b]
1960	281.0	104.8	374.2	33,495.0	12,577.5
1961	283.4	106.7	390.7	32,621.7	13,468.7
1962	295.1	110.9	420.7	32,713.9	13,795.1
1963	302.8	112.1	430.6	33,630.8	13,460.2
1964	317.9	115.3	469.5	37,089.1	13,234.6
1965	320.9	116.5	482.1	36,982.6	12,009.8
1966	336.4	118.8	510.0	38,259.3	12,755.1
1967	345.2	121.5	537.8	38,710.3	11,397.0
1968	362.4	124.1	567.6	40,378.0	13,129.2
1969	376.7	128.4	611.0	42,220.0	11,327.2
1970	386.8	129.2	640.9	42,386.7	12,232.3
1971	395.0	129.9	673.8	42,235.0	17,064.6
1972	397.7	130.4	697.3	41,948.8	16,428.8
1973	377.0	124.5	684.6	40,051.7	15,129.5
1974	361.1	119.6	676.1	42,066.8	12,586.1
1975	333.6	121.9	708.9	37,253.5	12,039.8
1976	329.7	121.3	718.6	40,022.3	3,511.6
1977	316.8	118.7	714.8	39,217.5	3,996.3
1978	322.2	121.0	743.6	36,635.8	4,511.8
1979	330.3	118.6	726.5	40,345.3	5,133.9
1980	326.4	111.0	701.0	42,505.2	3,645.2
1981	320.7	104.4	666.4	44,020.2	3,235.0
1982	292.9	107.1	680.6	36,514.2	3,243.0
1983	263.5	99.1	625.1	32,759.3	2,996.9
1984[R]	266.8	102.0	642.3	33,253.2	3,094.2
1985	252.5	98.3	612.7	31,470.5	2,739.8

a. Excludes customers purchasing for resale and sales for resale. Customer data is based on yearly averages. Excludes data for Alaska prior to 1961.

b. Prior to 1976, "Other" electric generation (See Table 6-12) is included in the "Other" class of service. For 1976 and beyond, all electric generation is included in the Industrial category.

R - Revised.

TABLE 10-6
GAS UTILITY INDUSTRY AVERAGE ANNUAL RESIDENTIAL CONSUMPTION PER CUSTOMER BY STATE, 1960-1985[a]

(MMBtu / Customer)

Division and State	1960	1965	1970	1975	1980	1984	1985
United States	**104.8**	**116.5**	**129.2**	**121.9**	**111.0**	**102.0**	**98.3**
New England	**49.5**	**67.7**	**86.0**	**85.3**	**90.0**	**89.2**	**88.8**
Connecticut	51.2	68.7	87.6	84.6	88.1	86.9	85.8
Maine	29.3	32.1	38.2	38.7	43.2	44.2	44.3
Massachusetts	50.2	69.2	87.0	86.0	91.3	89.4	89.9
New Hampshire	51.4	74.1	93.3	95.1	97.7	98.2	94.7
Rhode Island	47.6	65.0	82.9	84.0	86.7	93.0	89.3
Vermont	19.9	23.1	65.2	93.3	102.8	104.0	105.3
Middle Atlantic	**77.6**	**91.2**	**107.3**	**102.1**	**102.8**	**101.0**	**94.7**
New Jersey	56.9	73.5	92.2	88.5	89.7	90.9	87.8
New York	63.3	77.7	91.5	89.4	90.7	92.7	87.0
Pennsylvania	117.8	128.7	146.5	135.1	133.3	122.9	112.9
East North Central	**137.1**	**159.3**	**175.7**	**164.5**	**158.6**	**143.4**	**137.1**
Illinois	109.4	139.9	164.8	168.9	162.5	157.3	147.3
Indiana	103.5	134.1	159.9	151.5	143.9	130.8	122.8
Michigan	146.4	173.5	189.1	167.7	172.8	146.4	145.8
Ohio	183.0	188.5	193.5	171.2	158.3	141.3	131.8
Wisconsin	92.2	129.0	145.0	139.0	130.8	114.2	116.5
West North Central	**151.0**	**158.9**	**167.9**	**152.6**	**131.3**	**119.5**	**117.4**
Iowa	149.3	162.1	167.8	152.2	127.7	118.0	116.4
Kansas	157.0	156.6	165.8	150.4	126.6	114.2	110.8
Minnesota	145.9	167.3	175.6	159.7	138.9	125.6	129.2
Missouri	149.9	152.0	165.5	148.9	133.2	118.2	112.7
Nebraska	160.5	162.3	167.5	155.2	128.9	123.1	118.4
North Dakota	118.8	164.5	171.4	163.0	127.6	120.8	124.5
South Dakota	145.8	158.5	153.2	145.0	117.4	114.6	115.8
South Atlantic	**93.1**	**95.9**	**111.0**	**96.3**	**93.2**	**88.1**	**78.0**
Delaware	63.7	85.6	109.0	93.6	93.4	90.1	81.1
District of Columbia	79.8	87.8	102.7	95.9	103.5	103.2	90.3
Florida	19.6	27.1	48.2	38.6	40.0	37.4	32.5
Georgia	110.9	103.1	123.9	103.5	96.9	92.6	81.7
Maryland	84.3	95.3	110.6	97.5	96.6	95.3	85.0
North Carolina	78.2	89.8	112.1	92.7	97.1	88.8	76.6
South Carolina	68.8	75.9	91.1	72.7	77.3	67.6	58.1
Virginia	83.4	94.0	111.1	100.1	99.7	93.9	84.3
West Virginia	163.5	159.0	161.0	149.4	131.0	120.4	108.9
East South Central	**118.1**	**111.5**	**126.0**	**107.1**	**102.4**	**94.6**	**85.0**
Alabama	96.6	90.7	106.9	91.2	86.9	81.7	73.6
Kentucky	153.3	144.9	157.4	136.7	130.4	116.0	104.2
Mississippi	97.7	89.0	105.5	86.6	85.9	79.3	73.7
Tennessee	118.6	114.3	126.5	105.5	101.7	97.1	85.4
West South Central	**96.5**	**92.2**	**104.6**	**95.9**	**84.3**	**80.2**	**74.9**
Arkansas	121.7	113.8	133.0	114.0	95.6	100.7	87.2
Louisana	87.4	82.1	95.9	81.9	77.0	74.2	66.1
Oklahoma	114.9	116.3	126.8	120.6	103.5	101.8	95.3
Texas	91.2	86.3	97.6	91.5	80.2	73.2	70.4
Mountain	**138.2**	**140.2**	**140.5**	**131.0**	**103.9**	**97.5**	**94.0**
Arizona	75.3	77.0	78.4	77.3	59.1	52.7	54.6
Colorado	150.1	153.4	155.0	147.2	119.8	107.5	99.7
Idaho	100.5	118.0	114.7	110.7	79.5	77.7	81.3
Montana	175.9	185.0	175.5	171.2	126.1	117.1	123.7
Nevada	88.8	103.1	112.5	113.2	87.5	71.8	73.2
New Mexico	133.1	134.4	130.3	126.6	99.1	92.2	84.4
Utah	202.4	201.2	212.1	180.1	139.0	142.7	134.9
Wyoming	173.9	173.0	180.5	161.7	128.6	125.8	122.7
Pacific	**92.3**	**104.6**	**105.7**	**109.9**	**81.6**	**69.2**	**75.6**
Alaska	b	230.0	199.3	221.3	216.9	196.2	205.8
California	93.2	105.0	104.6	109.4	80.5	67.2	73.6
Hawaii	25.2	27.2	33.7	29.1	25.0	20.3	20.3
Oregon	78.9	90.6	113.2	107.0	79.8	78.2	83.5
Washington	105.1	115.5	128.3	122.0	95.5	87.5	94.0

a. Customer data is based on yearly averages.
b. Not available.

TABLE 10-7
HEATING DEGREE DAYS[a] BY CALENDAR YEAR AND HEATING SEASONS, 1985-1986, AND THIRTY-YEAR NORMALS

Division and State	Calendar Year Degree Days			Heating Season Degree Days[b]		
	30-Year[c] Normals 1951-1980	1984	1985	30-Year[c] Normals 1951/52-1980/81	1984-1985	1985-1986
United States	**4,694**	**4,643**	**4,773**	**3,798**	**3,789**	**3,707**
New England	6,562	6,408	6,537	5,071	4,887	5,014
Connecticut	6,146	5,903	5,886	4,839	4,548	4,711
Maine	7,945	7,853	8,257	5,892	5,873	6,036
Massachusetts	6,322	6,246	6,368	4,913	4,780	4,858
New Hampshire	7,599	7,331	7,568	5,752	5,529	5,707
Rhode Island	5,968	5,596	5,759	4,629	4,300	4,466
Vermont	7,979	7,926	8,184	6,045	5,915	6,139
Middle Atlantic	**5,820**	**5,774**	**5,674**	**4,661**	**4,488**	**4,577**
New Jersey	5,424	5,337	5,211	4,422	4,243	4,331
New York	5,943	5,839	5,810	4,730	4,524	4,639
Pennsylvania	5,881	5,951	5,764	4,708	4,592	4,639
East North Central	**6,375**	**6,416**	**6,544**	**5,131**	**5,126**	**5,209**
Illinois	6,175	6,266	6,600	5,083	5,175	5,294
Indiana	5,871	5,900	5,935	4,815	4,789	4,777
Michigan	6,823	6,834	6,855	5,363	5,268	5,423
Ohio	5,897	5,988	5,913	4,766	4,768	4,676
Wisconsin	7,665	7,529	7,971	6,004	5,943	6,307
West North Central	**6,657**	**6,590**	**7,128**	**5,419**	**5,409**	**5,558**
Iowa	6,932	6,802	7,371	5,663	5,552	5,991
Kansas	4,988	5,096	5,557	4,271	4,400	4,164
Minnesota	8,771	8,512	9,191	6,855	6,748	7,183
Missouri	5,091	5,118	5,563	4,344	4,316	4,364
Nebraska	6,435	6,521	6,913	5,261	5,209	5,286
North Dakota	9,481	9,187	9,956	7,277	7,304	7,309
South Dakota	7,714	7,645	8,244	6,091	6,067	6,357
South Atlantic	**2,999**	**2,901**	**2,842**	**2,603**	**2,512**	**2,444**
Delaware	4,784	4,656	4,372	4,007	3,722	3,843
District of Columbia	d	d	d	d	d	d
Florida	720	675	754	713	680	671
Georgia	2,788	2,646	2,654	2,507	2,411	2,259
Maryland	4,811[e]	4,677[e]	4,465[e]	4,034[e]	3,824[e]	3,884[e]
North Carolina	3,481	3,354	3,229	3,043	2,949	2,796
South Carolina	2,743	2,605	2,564	2,495	2,409	2,246
Virginia	4,532	4,102	4,102	3,661	3,529	3,529
West Virginia	5,250	5,156	5,098	4,270	4,248	4,082
East South Central	**3,555**	**3,448**	**3,601**	**3,109**	**3,110**	**2,928**
Alabama	2,828	2,712	2,844	2,549	2,498	2,380
Kentucky	4,544	4,453	4,546	3,861	3,889	3,634
Mississippi	2,510	2,396	2,644	2,308	2,284	2,191
Tennessee	3,954	3,848	4,015	3,422	3,463	3,233
West South Central	**2,313**	**2,223**	**2,498**	**2,142**	**2,139**	**1,931**
Arkansas	3,327	3,252	3,502	2,991	2,987	2,728
Louisiana	1,794	1,690	1,882	1,703	1,641	1,558
Oklahoma	3,571	3,564	3,910	3,213	3,258	3,028
Texas	2,035	1,931	2,220	1,908	1,912	1,681
Mountain	**5,529**	**5,843**	**5,933**	**4,182**	**4,454**	**3,949**
Arizona	2,313	2,215	2,281	2,037	2,083	1,671
Colorado	7,123	7,668	7,659	5,192	5,365	4,969
Idaho	6,935	7,658	8,269	5,061	5,918	5,332
Montana	8,260	8,143	8,897	5,822	6,235	5,802
Nevada	4,263	4,455	4,525	3,373	3,709	3,000
New Mexico	4,756	4,828	4,674	3,842	3,844	3,372
Utah	6,555	7,389	7,198	4,966	5,573	4,760
Wyoming	8,023	8,439	8,743	5,744	6,130	5,672
Pacific	**3,322**	**3,180**	**3,465**	**2,432**	**2,678**	**2,226**
Alaska	f	f	f	f	f	f
California	2,703	2,486	2,694	2,060	2,258	1,746
Hawaii	f	f	f	f	f	f
Oregon	5,255	5,413	5,905	3,573	3,954	3,677
Washington	5,637	5,742	6,336	3,840	4,271	4,053

a. See glossary for definitions of (heating) degree days. Division heating degree days are the weighted average of all states in a region, according to the 1980 population. National heating degree days are the weighted average of all divisions, according to the 1980 population.
b. Heating season is defined as November through March period.
c. The transference of many weather stations between city locations and nearby airports at some time during the 30 year period has led to the introduction of slight inconsistencies in the average data.
d. Included in Maryland.
e. Includes the District of Columbia.
f. Not available.

Source: National Oceanic and Atmospheric Administration, *Monthly State, Regional and National Heating Degree Days Weighted by Population.*

TABLE 10-8
GAS UTILITY INDUSTRY AVERAGE ANNUAL CONSUMPTION PER CUSTOMER BY STATE AND CLASS OF SERVICE, 1985[a]

(MMBtu/Customer)

Division and State	Total	Class of Service				
		Residential	Commercial	Industrial	Electric Generation	Other
United States	**252.5**	**98.3**	**612.7**	**20,643.8**	**3,968,805.9**	**2,739.8**
New England	**189.5**	**88.8**	**605.7**	**9,257.8**	**4,153,881.8**	**654.3**
Connecticut	181.5	85.8	691.0	7,807.4	b	1,307.1
Maine	170.3	44.3	394.7	12,082.2	b	b
Massachusetts	195.4	89.9	615.9	10,902.0	4,285,130.0	677.1
New Hampshire	183.6	94.7	552.0	11,309.2	b	869.9
Rhode Island	165.5	89.3	391.7	6,064.1	2,841,400.0	7,714.3
Vermont	290.9	105.3	552.4	120,795.0	b	243.9
Middle Atlantic	**179.4**	**94.7**	**535.3**	**13,412.4**	**6,355,450.0**	**3,174.7**
New Jersey	171.2	87.8	456.7	11,399.0	5,120,275.7	7,182.6
New York	158.8	87.0	477.7	8,571.8	9,222,750.0	2,844.8
Pennsylvania	220.6	112.9	725.5	26,529.6	223,900.0	4,828.0
East North Central	**260.6**	**137.1**	**784.9**	**17,383.4**	**91,359.8**	**2,326.2**
Illinois	268.5	147.3	842.3	12,250.8	163,355.6	276.1
Indiana	304.6	122.8	629.4	37,437.8	66,800.0	3,037.5
Michigan	261.7	145.8	943.0	16,323.4	56,390.0	2,524.0
Ohio	223.6	131.8	713.3	20,653.5	18,950.0	2,722.3
Wisconsin	275.2	116.5	669.3	15,743.6	133,580.0	22,411.1
West North Central	**261.6**	**117.4**	**658.0**	**28,918.6**	**75,672.6**	**3,861.4**
Iowa	283.9	116.4	586.0	50,662.6	34,572.5	974.8
Kansas	315.9	110.8	569.3	24,375.6	145,730.4	14,301.4
Minnesota	275.7	129.2	704.1	20,754.8	45,339.1	2,042.2
Missouri	206.4	112.7	766.8	52,008.1	91,373.9	2,469.6
Nebraska	265.8	118.4	583.0	30,415.0	31,845.2	1,369.0
North Dakota	238.5	124.5	951.1	36,844.4	8,300.0	2,000.0
South Dakota	225.7	115.8	667.2	11,849.0	11,100.0	44,600.0
South Atlantic	**248.6**	**78.0**	**657.3**	**27,755.0**	**4,131,903.4**	**1,085.5**
Delaware	264.8	81.1	646.2	49,706.4	846,500.0	688.0
District of Columbia	192.5	90.3	1,104.2	b	b	b
Florida	505.8	32.5	818.1	132,329.2	6,546,805.6	4,095.5
Georgia	226.2	81.7	622.1	46,806.2	137,083.3	113.3
Maryland	147.6	85.0	575.6	4,782.8	49,000.0	944.6
North Carolina	281.7	76.6	544.3	26,710.6	22,000.0	812.5
South Carolina	296.0	58.1	512.2	49,206.3	91,200.0	778.5
Virginia	220.5	84.3	774.4	17,190.3	b	3,099.7
West Virginia	202.5	108.9	631.2	67,542.6	151,500.0	685.6
East South Central	**273.7**	**85.0**	**520.9**	**43,851.7**	**3,098,414.3**	**1,260.9**
Alabama	260.3	73.6	538.7	53,032.8	44,700.0	276.7
Kentucky	220.1	104.2	503.2	36,764.9	b	4,111.5
Mississippi	350.0	73.7	365.3	47,079.9	3,933,863.6	2,460.5
Tennessee	297.2	85.4	609.2	37,750.4	15,900.0	522.0
West South Central	**398.5**	**74.9**	**469.3**	**38,450.3**	**9,169,083.3**	**5,173.9**
Arkansas	269.2	87.2	448.9	42,526.3	570,358.3	2,309.7
Louisiana	286.4	66.1	368.8	86,026.1	2,670,047.6	12,045.4
Oklahoma	291.7	95.3	485.9	42,074.2	1,180,883.3	890.4
Texas	479.5	70.4	492.4	32,182.4	15,747,962.7	3,955.2
Mountain	**215.5**	**94.0**	**604.6**	**24,408.8**	**1,794,725.0**	**4,604.3**
Arizona	200.5	54.6	548.5	20,463.6	7,476,266.7	4,369.7
Colorado	189.5	99.7	622.8	23,897.4	375,357.1	3,730.6
Idaho	282.8	81.3	573.7	95,957.1	b	b
Montana	232.8	123.7	660.0	15,586.1	303,900.0	31,876.9
Nevada	206.1	73.2	790.9	4,727.0	1,447,200.0	65,014.3
New Mexico	203.4	84.4	438.9	82,020.8	1,525,175.0	3,864.9
Utah	261.5	134.9	618.9	71,021.2	87,500.0	12,000.0
Wyoming	298.3	122.7	745.5	77,315.6	137,900.0	2,737.0
Pacific	**232.2**	**75.6**	**537.3**	**11,696.3**	**32,854,047.6**	**14,736.7**
Alaska	590.2	205.8	1,103.1	b	2,647,442.9	b
California	223.5	73.6	501.0	10,519.6	51,645,915.4	16,139.6
Hawaii	95.2	20.3	305.9	1,123.9	b	b
Oregon	254.2	83.5	511.1	53,438.9	b	b
Washington	333.1	94.0	764.6	20,454.5	6,000.0	9,376.9

a. Excludes customers purchasing for resale and sales for resale. Customer data is based on yearly averages.
b. No sales reported.

SECTION 11
APPLIANCE AND HOUSING DATA

	1985	% Change 85/84
Manufacturer Shipments		
(Thousands of Units)		
Central Heating	2,014	− 0.7
Ranges	1,828	+ 5.5
Water Heaters	3,529	+ 0.8
Clothes Dryers	834	+10.6
New One-Family Houses Completed		
(Thousands of Units)		
Gas Heat	466	+ 1.3

Note: Certain tables in this section could not be updated because current information was not available.

TABLE 11-1
MANUFACTURER SHIPMENTS OF GAS RANGES, WATER HEATERS AND CLOTHES DRYERS, 1960-1985[a]

(Thousands of Units)

Year	Domestic Range Sales			Automatic Domestic Water Heater Sales			Automatic Gas Dryers[c]
	Free-Standing[b]	Built-in	Total	Natural Gas	L.P. Gas	Total	
1960	1,475	339	1,814	2,383	338	2,721	431
1961	1,484	346	1,830	2,448	284	2,732	412
1962	1,621	360	1,981	2,588	288	2,876	475
1963	1,714	358	2,072	2,346	251	2,597	535
1964	1,826	345	2,171	2,482	242	2,724	632
1965	1,976	291	2,267	2,497	240	2,737	710
1966	1,931	232	2,163	2,341	296	2,637	751
1967	1,954	169	2,123	2,246	309	2,555	829
1968	2,102	184	2,286	2,411	345	2,756	876
1969	2,282	189	2,471	2,386	356	2,742	905
1970	2,195	167	2,362	2,404	381	2,785	852
1971	2,363	186	2,549	2,645	443	3,088	847
1972	2,467	194	2,661	2,676	487	3,163	936
1973	2,312	169	2,481	2,568	512	3,080	926
1974	1,825	125	1,950	2,210	359	2,569	739
1975	1,493	125	1,618	2,388	257	2,645	672
1976	1,693	131	1,824	2,695	417	3,112	707
1977[R]	1,615	131	1,746	d	d	3,070	736
1978	1,665	129	1,794	2,578	343	2,921	757
1979[R]	1,670	129	1,799	2,548	339	2,887	757
1980	1,437	102	1,539	2,498	320	2,818	682
1981[R]	1,401	95	1,496	2,461	324	2,785	639
1982	1,289	79	1,368	2,771	270	3,041	584
1983	1,477	96	1,573	2,953	219	3,172	672
1984	1,626	106	1,732	3,281	221	3,502	754
1985	1,729	99	1,828	3,303	226	3,529	834

a. Shows shipments by manufacturers, expanded from returns of reporting companies to represent industry-wide coverage. Shipments of appliances for L.P. gas users include those for use by customers obtaining such gas through utility mains, as well as bottled gas users.
b. Free-standing includes free-standing, "set-in" and high-oven ranges.
c. Excludes combination washer-dryer units.
d. Not Available.
R–Revised.
Source: Gas Appliance Manufacturers Association, *Statistical Highlights*, Ten Year Summary, 1976-1985.

TABLE 11-2
MANUFACTURER SHIPMENTS OF GAS HEATING EQUIPMENT, 1960-1985[a]

(Thousands of Units)

Year	Central Heating Equipment				Floor and Wall Furnaces Total[b]	Direct Heating Equipment Total
	Warm Air Furnaces	Conversion Burners	Boilers	Total		
1960	900	132	153	1,185	453	1,211
1961	929	116	168	1,213	467	1,067
1962	1,009	104	175	1,288	515	1,161
1963	1,102	108	184	1,394	525	1,324
1964	1,186	101	199	1,486	555	1,190
1965	1,238	93	200	1,531	501	994
1966	1,213	93	186	1,492	515	1,034
1967	1,146	84	174	1,404	471	920
1968	1,428	79	187	1,694	555	974
1969	1,546	77	176	1,799	576	1,043
1970	1,471	66	164	1,701	545	781
1971	1,795	53	157	2,005	612	783
1972	2,066	40	156	2,262	762	708
1973	1,719	43	147	1,909	652	678
1974	1,476	89	123	1,688	409	488
1975	1,186	39	88	1,313	435	332
1976	1,554	26	113	1,693	523	306
1977	1,508	c	113	1,621	481	193
1978	1,636	c	126	1,762	532	175
1979	1,863	c	221	2,084	365	193
1980	1,446	c	293	1,739	297	222
1981	1,417	c	162	1,579	253	133
1982	1,156	c	148	1,304	260	182
1983	1,662	c	148	1,810	363	203
1984	1,849	c	180	2,029	391	256
1985	1,822	c	192	2,014	430	283

a. Shows shipments by manufacturers; expanded from returns of reporting companies to represent industry-wide coverage.
b. Includes RV central and wall furnaces.
c. Not available.
Source: Gas Appliance Manufacturers Association, *Statistical Highlights*, Ten Year Summary, 1976-1985.

TABLE 11-3
MANUFACTURER SHIPMENTS OF RESIDENTIAL GAS APPLIANCES, BY MONTH, 1985

(Thousands of Units)

Month	Ranges		Automatic Water Heaters	Dryers[b]	Central Heating	
	Free-Standing[a]	Built-in			Warm Air Furnaces	Boilers
January	120.4	7.6	319.2	78.3	148.2	12.1
February	122.4	7.9	284.3	70.4	114.0	11.8
March	154.0	10.1	286.3	60.2	125.9	8.9
April	117.9	7.5	324.2	61.0	112.4	9.1
May	135.1	8.3	278.0	61.2	115.1	9.3
June	164.5	9.6	270.1	63.6	130.8	13.0
July	103.6	5.8	288.4	62.4	127.6	12.9
August	155.2	7.5	274.0	60.2	182.4	22.5
September	177.3	8.1	273.4	77.4	195.6	24.6
October	175.9	8.7	334.3	95.0	219.6	28.9
November	154.7	8.7	288.2	75.7	181.0	24.9
December	148.4	9.2	308.5	68.1	169.7	14.5
Total	1,729.4	99.0	3,528.9	833.5	1,822.3	192.4

a. Free-standing includes free-standing, "set-in" and high-oven ranges.
b. Excludes combination washer-dryer units.
Source: Gas Appliance Manufacturers Association, *Statistical Highlights*, March 1986.

TABLE 11-4
NUMBER OF OCCUPIED HOUSING UNITS,[a] BY TYPE OF HEATING FUEL AND BY CENSUS REGION, 1975-1982

(Thousands of Occupied Units)

Year and Region	Total	Gas	Electricity	Oil[b]	Other[c] / None
1975					
United States	**72,523**	**40,933**	**9,173**	**16,299**	**6,117**
Northeast	16,508	6,446	802	8,875	386
Midwest[d]	19,393	13,666	1,154	3,027	1,546
South	23,105	11,352	4,965	3,508	3,280
West	13,518	9,469	2,253	889	907
1976					
United States	**74,005**	**41,219**	**10,151**	**16,451**	**6,184**
Northeast	16,544	6,140	846	9,161	397
Midwest[d]	19,722	13,803	1,366	3,004	1,549
South	23,742	11,449	5,498	3,488	3,307
West	13,998	9,826	2,441	798	933
1977					
United States	**75,280**	**41,543**	**11,146**	**16,060**	**6,531**
Northeast	16,637	6,151	958	9,103	425
Midwest[d]	19,855	13,893	1,506	2,843	1,613
South	24,379	11,577	6,033	3,335	3,434
West	14,407	9,922	2,649	778	1,058
1978					
United States	**77,167**	**42,522**	**12,258**	**16,071**	**6,316**
Northeast	16,952	6,301	999	9,252	400
Midwest[d]	20,171	14,140	1,685	2,817	1,529
South	25,093	11,956	6,561	3,263	3,313
West	14,951	10,125	3,013	739	1,074
1979					
United States	**78,572**	**43,323**	**13,244**	**15,708**	**6,297**
Northeast	17,122	6,558	1,109	9,056	399
Midwest[d]	20,565	14,428	1,864	2,724	1,549
South	25,584	12,054	7,074	3,191	3,265
West	15,301	10,283	3,197	737	1,084
1980					
United States	**80,072**	**44,398**	**14,208**	**14,868**	**6,598**
Northeast	17,264	6,928	1,169	8,685	482
Midwest[d]	20,842	14,688	2,036	2,503	1,615
South	26,286	12,290	7,615	3,009	3,372
West	15,680	10,492	3,388	671	1,129
1981					
United States	**83,175**	**46,084**	**15,486**	**14,494**	**7,111**
Northeast	17,851	7,335	1,281	8,642	593
Midwest[d]	21,565	15,308	2,211	2,328	1,718
South	27,431	12,725	8,225	2,905	3,576
West	16,328	10,716	3,770	619	1,223
1982					
United States	**84,638**	**46,700**	**15,684**	**13,031**	**9,223**
Northeast	18,221	7,741	1,319	8,226	934
Midwest[d]	21,618	15,656	2,172	1,774	2,015
South	27,931	12,346	8,557	2,559	4,470
West	16,868	10,956	3,635	472	1,805

a. Units include both single-family and multifamily.
b. Oil includes kerosene.
c. Other includes LP gas, coal, wood and solar heat.
d. Formerly North Central.

Source: U.S. Bureau of the Census, Current Housing Reports—Series H-150. *Annual Housing Survey.* Part A: General Housing Characteristics.

TABLE 11-5
NEW ONE FAMILY HOUSES[a] COMPLETED, BY TYPE OF HEATING FUEL AND BY CENSUS REGION, 1977-1985

(Thousands of Units)

Year and Region	Total	Gas	Electricity	Oil[b]	Other / None
1977					
United States	**1,258**	**476**	**635**	**120**	**28**
Northeast	135	22	42	67	5
Midwest[c]	300	138	121	30	11
South	512	139	341	23	8
West	311	176	130	d	4
1978					
United States	**1,369**	**511**	**710**	**109**	**40**
Northeast	141	23	48	60	11
Midwest[c]	300	149	107	32	11
South	571	153	392	16	9
West	357	186	162	d	9
1979					
United States	**1,301**	**512**	**662**	**86**	**41**
Northeast	135	32	47	48	7
Midwest[c]	294	162	96	22	14
South	535	147	365	14	9
West	337	170	154	d	12
1980					
United States	**957**	**393**	**483**	**29**	**52**
Northeast	100	35	36	18	11
Midwest[c]	170	101	47	6	16
South	455	136	303	5	11
West	232	121	97	d	14
1981[R]					
United States	**819**	**339**	**407**	**16**	**57**
Northeast	87	30	34	11	12
Midwest[c]	140	87	37	d	13
South	408	128	262	d	16
West	183	94	74	d	15
1982					
United States	**632**	**252**	**315**	**17**	**48**
Northeast	79	28	27	14	10
Midwest[c]	92	53	24	3	13
South	340	112	214	d	13
West	121	59	50	d	12
1983					
United States	**924**	**400**	**448**	**22**	**53**
Northeast	106	40	38	18	9
Midwest[c]	142	92	35	d	13
South	476	163	296	d	15
West	200	105	79	d	16
1984					
United States	**1,025**	**460**	**492**	**24**	**49**
Northeast	129	53	46	21	9
Midwest[c]	156	110	30	d	14
South	508	170	325	d	12
West	233	127	91	d	14
1985					
United States	**1,072**	**466**	**528**	**36**	**42**
Northeast	168	65	63	32	8
Midwest[c]	151	111	31	d	7
South	514	146	354	d	11
West	239	144	79	d	16

a. Includes only privately-owned housing units.
b. Does not include kerosene.
c. Formerly North Central.
d. Withheld because estimate did not meet Bureau of the Census publication standards.
R–Revised.
Source: U.S. Bureau of the Census, Construction Reports—Series C25, *Characteristics of New Housing*, 1985.

TABLE 10-9
GAS CONSUMPTION BY RESIDENTIAL APPLIANCES, 1982
AVERAGE CONSUMPTION, EXCLUDING EXTREMES

(Therms Per Year)

	House Range	Apt. Range	Water Heater	Clothes Dryer (gas pilot)	Clothes Dryer (elec. pilot)	Gas Light	Air Conditioner Consumption Per Ton	Gas Grill	Space Heating		Pulse Combustion
									Gas Pilot	Elec. Ignition	
United States[a]	79	56	267	60	41	150	198	26	760	702	541
New England	117	112	295	69	58	200	b	50	1,063	946	768
Middle Atlantic	94	51	326	57	37	180	339	30	918	869	641
East North Central	69	45	311	72	50	180	155	19	1,249	1,185	896
West North Central	74	61	319	76	57	161	202	21	958	906	670
South Atlantic	98	64	317	85	52	216	262	25	782	736	561[c]
East South Central	76	37	353	83	53	180	400	60	567	540	403[c]
West South Central	104	56	248	77	50	206	400	40	571	543	406[c]
Mountain	66	50	294	81	50	167	163	15	825	684	556[c]
Pacific	83	67	239	48	35	125	150	30	493	440	348[c]

a. United States average consumption figures include several companies which are not included in division averages because no divisional breakout could be made.
b. Not available.
c. Statistical base for this datapoint is not as broad as for others.

TABLE 11-6
UNITS[a] IN NEW MULTIFAMILY BUILDINGS COMPLETED, BY TYPE OF HEATING FUEL AND BY CENSUS REGION, 1977-1985

(Thousands of Units)

Year and Region	Total	Gas	Electricity	Oil[b]	Other / None
1977					
United States	**399**	**115**	**261**	**18**	**4**
Northeast	41	9	20	10	2
Midwest[c]	99	39	54	6	d
South	125	16	106	3	d
West	133	51	81	d	1
1978					
United States	**498**	**131**	**339**	**24**	**5**
Northeast	41	9	13	18	d
Midwest[c]	117	44	70	2	d
South	181	16	161	3	1
West	160	61	95	d	4
1979					
United States	**570**	**150**	**386**	**27**	**6**
Northeast	53	11	21	21	d
Midwest[c]	121	50	69	2	1
South	227	22	200	4	2
West	169	68	97	d	4
1980					
United States	**545**	**165**	**362**	**12**	**6**
Northeast	46	16	20	10	d
Midwest[c]	104	46	57	d	1
South	242	36	204	2	d
West	153	67	81	d	5
1981					
United States	**447**	**142**	**293**	**7**	**4**
Northeast	40	23	11	5	d
Midwest[c]	78	42	36	d	d
South	218	33	184	1	d
West	111	44	63	d	4
1982					
United States	**374**	**103**	**255**	**9**	**7**
Northeast	41	15	17	8	1
Midwest[c]	51	32	17	d	2
South	199	21	176	d	1
West	82	34	45	d	3
1983					
United States	**467**	**133**	**327**	**3**	**4**
Northeast	33	21	9	d	e
Midwest[c]	59	37	22	d	1
South	270	31	238	d	1
West	104	44	58	d	3
1984					
United States	**627**	**165**	**452**	**5**	**5**
Northeast	40	16	18	d	1
Midwest[c]	65	34	32	d	e
South	358	46	312	d	e
West	164	70	90	d	4
1985					
United States	**631**	**197**	**425**	**3**	**5**
Northeast	46	25	17	3	1
Midwest[c]	79	36	42	d	1
South	298	34	263	d	1
West	207	101	103	d	3

a. Includes only privately-owned housing units.
b. Does not include kerosene.
c. Formerly North Central.
d. Withheld because estimate did not meet Bureau of the Census publication standards.
e. Fewer than 500 units.
Source: U.S. Bureau of the Census, Construction Reports—Series C25, *Characteristics of New Housing*, 1985.

TABLE 11-7
NUMBER OF OCCUPIED HOUSING UNITS,[a] BY TYPE OF COOKING FUEL AND BY CENSUS REGION, 1974-1980

(Thousands of Occupied Units)

Year and Region	Total	Gas	Electricity	Oil[b]	Other[c] / None
1974					
United States	**70,831**	**31,908**	**32,720**	**82**	**6,120**
Northeast	16,281	9,211	5,747	46	1,277
Midwest[d]	18,993	8,908	8,423	14	1,648
South	22,489	7,985	11,797	19	2,688
West	13,067	5,803	6,754	4	506
1975					
United States	**72,523**	**32,493**	**33,944**	**76**	**6,011**
Northeast	16,508	9,244	5,973	27	1,264
Midwest[d]	19,393	9,051	8,699	16	1,627
South	23,105	8,229	12,224	31	2,621
West	13,518	5,968	7,048	3	499
1976					
United States	**74,003**	**32,299**	**35,669**	**44**	**5,991**
Northeast	16,545	9,086	6,178	14	1,267
Midwest[d]	19,722	8,978	9,165	7	1,572
South	23,741	8,179	12,897	22	2,643
West	13,996	6,057	7,429	1	509
1977					
United States	**75,280**	**32,207**	**37,042**	**45**	**5,986**
Northeast	16,635	9,096	6,280	17	1,242
Midwest[d]	19,857	8,857	9,426	14	1,560
South	24,379	8,146	13,563	11	2,659
West	14,408	6,107	7,773	2	526
1978					
United States	**77,167**	**32,576**	**38,779**	**107**	**5,705**
Northeast	16,952	9,185	6,568	44	1,155
Midwest[d]	20,171	8,847	9,833	32	1,459
South	25,094	8,242	14,234	24	2,594
West	14,950	6,302	8,144	7	497
1979					
United States	**78,572**	**32,551**	**40,345**	**84**	**5,593**
Northeast	17,123	9,162	6,752	42	1,166
Midwest[d]	20,565	8,958	10,180	15	1,413
South	25,585	8,171	14,873	22	2,519
West	15,299	6,258	8,540	6	496
1980					
United States	**80,072**	**32,664**	**41,729**	**152**	**5,528**
Northeast	17,264	9,234	6,828	65	1,138
Midwest[d]	20,842	8,898	10,516	30	1,398
South	26,286	8,196	15,531	37	1,521
West	15,680	6,336	8,852	20	471

a. Units include both single-family and multifamily.
b. Oil includes kerosene.
c. Other includes LP gas, coal and wood.
d. Formerly North Central.

Sources: For 1974-1977, U.S. Bureau of the Census, Current Housing Reports—Series H-150, *Annual Housing Survey*, Part A. For 1978-1980, U.S. Bureau of the Census, Current Housing Reports—Series H-150, *Annual Housing Survey*, Part F: Energy-Related Housing Characteristics.

TABLE 11-8
NUMBER OF OCCUPIED HOUSEHOLDS BY TYPE OF FUEL USED FOR WATER HEATING AND CLOTHES DRYING, AND BY CENSUS REGION, 1981

(Millions of Households)

Region	Total	Gas	Electricity	Oil[a]	Other[b]/None
Water Heating					
United States	**83.1**	**45.6**	**27.1**	**6.1**	**4.3**
Northeast	17.9	8.0	3.6	5.7	.6
Midwest[c]	21.3	14.5	5.2	.1	1.5
South	27.7	11.9	13.9	.3	1.6
West	16.2	11.2	4.3	d	.7
Clothes Drying					
United States	**83.1**	**12.5**	**37.5**	**e**	**33.2**
Northeast	18.0	3.2	6.1	e	8.7
Midwest[c]	21.1	4.3	10.2	e	6.6
South	27.8	2.2	13.9	e	11.7
West	16.3	2.8	7.3	e	6.2

NUMBER OF OCCUPIED HOUSEHOLDS BY TYPE OF FUEL USED FOR WATER HEATING AND CLOTHES DRYING, AND BY CENSUS REGION, 1982

(Millions of Households)

Region	Total	Gas	Electricity	Oil[a]	Other[b]/None
Water Heating					
United States	**83.8**	**47.1**	**26.6**	**5.7**	**4.4**
Northeast	18.0	8.7	3.7	5.0	.6
Midwest[c]	21.2	14.7	5.5	.1	.9
South	27.9	12.4	13.2	.4	1.9
West	16.4	11.3	4.2	.1	.8
Clothes Drying					
United States	**83.8**	**11.3**	**37.9**	**e**	**34.6**
Northeast	18.0	2.5	6.9	e	8.6
Midwest[c]	21.4	4.0	9.7	e	7.7
South	28.1	2.2	14.2	e	11.7
West	16.5	2.6	7.2	e	6.7

a. Oil includes kerosene.
b. Other includes LP gas, coal, wood and solar.
c. Formerly North Central.
d. Data withheld because of a large variance.
e. Not applicable.
Source: U.S. Department of Energy, Energy Information Administration, *Residential Energy Consumption Survey: Housing Characteristics.*

SECTION 12
INCOME ACCOUNTS

	1985	% Change 85/84
Total Operating Revenues		
(Millions)		
Total Industry	$103,945	−10.0
Distribution	21,510	+23.9
Transmission	45,738	−14.2
Integrated	17,396	−32.0
Combination	19,301	+ 0.5
Net Income		
(Millions)		
Total Industry	$ 3,784	−32.7
Distribution	831	+32.6
Transmission	1,757	−39.0
Integrated	471	−60.9
Combination	725	−20.3

TABLE 12-1
COMPOSITE INCOME ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
TOTAL INDUSTRY[a], 1960–1985

(Millions)

	1960	1965	1970	1975	1980	1984[R]	1985
Total Operating Revenues	$8,696	$11,525	$16,380	$30,550	$85,918	$115,491	$103,945
Operation Expenses	5,689	7,657	11,205	22,254	73,288	97,374	86,944
Maintenance Expenses	262	316	431	703	1,220	1,579	1,628
Total Operation and Maintenance Expenses	5,951	7,973	11,636	22,957	74,508	98,953	88,572
Depreciation, Retirements, Depletion, etc.	578	798	1,101	1,760	2,434	3,066	3,158
Federal Income Taxes[b]	540	633	605	965	1,369	2,746	2,282
Provision for Deferred Federal Income Taxes				465	1,949	2,138	2,206
Portion of Current Federal Income Taxes Provided For in Prior Years	79	45	34	(252)	(1,406)	(1,684)	(1,676)
Investment Tax Credit Adjustment	b	b	b	130	213	251	238
Other Federal Taxes	22	27	55	109	202	341	355
State Income Taxes	23	26	46	116	200	374	314
Other State and Local Taxes	394	561	829	1,230	2,320	2,980	2,871
Total Taxes	1,058	1,292	1,569	2,763	4,847	7,146	6,590
Total Operating Expenses	7,587	10,063	14,306	27,480	81,789	109,165	98,320
Operating Income	1,109	1,462	2,074	3,070	4,129	6,326	5,625
Other Operating Income	3	7	12	21	23	17	140
Allowance for Funds Used During Construction	25	34	73	130	319	304	265
Utility Operating Income	1,137	1,503	2,159	3,221	4,471	6,647	6,030
Other Income (Non-Operating) (Net)[c]	110	157	298	916[d]	2,458[d]	2,421[d]	1,606
Income Before Interest Charges	1,247	1,660	2,457	4,137[d]	6,929[d]	9,068[d]	7,636
Interest on Long-Term Debt	374	499	867	1,423	1,961	2,866	2,847
Amortization of Debt Disc. Exp. and Premium	2	5	9	12	15	21	25
Other Interest Expense (Net)	41	49	154	203	622	531	724
Total Interest Charges	417	553	1,030	1,638	2,598	3,418	3,596
Net Income Before Extraordinary Items	e	e	e	2,499[d]	4,331[d]	5,650[d]	4,039
Extraordinary Items, Less Taxes	c	c	c	3	(137)	(31)	(255)
Net Income	830	1,107	1,427	2,502[d]	4,194[d]	5,619[d]	3,785
Preferred Dividends	69	78	129	184	296	474	430
Common Dividends	512	703	877	1,325	2,268	3,997	3,630
Note:							
Number of Companies Reporting[f]	310	304	291	204	201	183	184
Op. Rev. of Companies Reporting (Millions)	$8,112	$10,751	$15,776	$29,057	$79,896	$106,392	$ 94,935

a. For combination companies, only gas operations are included.
b. "Investment Tax Credit Adjustment" included in "Federal Income Taxes" prior to 1971.
c. "Extraordinary Items" included in "Other Income (Non-Operating) (Net)" prior to 1971.
d. Not comparable with prior years due to a 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries.
e. Not available.
f. Financial data of report companies expanded to represent total industry on the basis of operating revenues. As of 1971 total number of sample companies limited to companies with operating revenues over $3,000,000.
( ): Denotes negative.
R-Revised.
Note: Data not directly comparable from year to year due to acquisitions and mergers. See page ix.

TABLE 12-2
COMPOSITE INCOME ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
DISTRIBUTION COMPANIES, 1979–1985

(Millions)

	1979	1980	1981	1982	1983	1984	1985
Total Operating Revenues	$11,767	$14,013	$12,726	$14,653	$16,743	$17,366	$21,510
Operation Expenses	9,410	11,539	10,727	12,523	14,064	14,370	17,387
Maintenance Expenses	233	252	206	217	271	294	420
Total Operation and Maintenance Expenses	9,643	11,791	10,933	12,740	14,335	14,664	17,807
Depreciation, Retirements, Depletion, etc.	315	336	292	314	372	397	571
Federal Income Taxes	209	193	106	123	176	388	345
Provision for Deferred Federal Income Taxes	106	97	112	144	214	139	250
Portion of Current Federal Income Taxes Provided For in Prior Years	(30)	(42)	(34)	(69)	(70)	(120)	(68)
Investment Tax Credit Adjustment	32	53	41	36	35	40	71
Other Federal Taxes	45	50	46	52	62	70	97
State Income Taxes	26	33	32	33	44	47	65
Other State and Local Taxes	668	752	555	624	774	837	1,122
Total Taxes	1,056	1,136	858	943	1,235	1,401	1,882
Total Operating Expenses	11,014	13,263	12,083	13,997	15,942	16,462	20,260
Operating Income	753	750	643	656	801	904	1,250
Other Operating Income	2	3	2	2	2	3	4
Allowance for Funds Used During Construction	5	8	17	16	12	11	9
Utility Operating Income	760	761	662	674	815	918	1,263
Other Income (Non-Operating) (Net)	56	50	51	76	91	94	121
Income Before Interest Charges	816	811	713	750	906	1,012	1,384
Interest on Long-Term Debt	252	279	248	297	323	327	456
Amortization of Debt Disc. Exp. and Premium	2	2	2	2	3	4	5
Other Intererst Expense (Net)	48	78	104	80	60	54	93
Total Interest Charges	303	359	354	379	386	385	554
Net Income Before Extraordinary Items	513	452	359	371	520	627	829
Extraordinary Items, Less Taxes	5	1	2	2	a	a	2
Net Income	518	453	361	373	521	627	831
Preferred Dividends	27	30	22	22	31	31	44
Common Dividends	333	330	246	257	329	400	640
Note:							
Number of Companies Reporting	51	56	52	52	53	53	65
Op. Rev. of Companies Reporting (Millions)	$10,747	$12,959	$11,699	$13,407	$15,395	$15,659	$19,424

a. Less than $500,000.
( ): Denotes negative.
Note: Data not directly comparable from year to year due to acquisitions and mergers. See page ix.

TABLE 12-3
COMPOSITE INCOME ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
TRANSMISSION COMPANIES, 1960–1985

(Millions)

	1960	1965	1970	1975	1980	1984[R]	1985
Total Operating Revenues	3,190	$4,088	$5,928	$11,898	$41,604	$53,319	$45,738
Operation Expenses	2,031	2,747	4,094	8,463	36,075	46,269	39,635
Maintenance Expenses	64	78	109	187	405	499	523
Total Operation and Maintenance Expenses	2,095	2,825	4,203	8,650	36,480	46,768	40,158
Depreciation, Retirements, Depletion, etc.	284	357	509	896	1,238	1,465	1,449
Federal Income Taxes[a]	163	212	200	646	846	1,131	1,103
Provision for Deferred Federal Income Taxes				246	1,421	1,593	1,399
Portion of Current Federal Income Taxes Provided For in Prior Years	56	13	(9)	(221)	(1,069)	(1,084)	(1,189)
Investment Tax Credit Adjustment	a	a	a	48	77	38	49
Other Federal Taxes	4	5	11	22	52	84	92
State Income Taxes	8	8	12	52	92	139	101
Other State and Local Taxes	88	117	162	221	572	452	425
Total Taxes	319	355	376	1,014	1,991	2,353	1,980
Total Operating Expenses	2,698	3,537	5,088	10,560	39,709	50,586	43,587
Operating Income	492	551	840	1,338	1,895	2,733	2,151
Other Operating Income	b	b	b	b	3	1	125
Allowance for Funds Used During Construction	11	18	24	38	126	40	44
Utility Operating Income	503	569	864	1,376	2,024	2,774	2,320
Other Income (Non-Operating) (Net)[c]	32	70	190	640[d]	1,755[d]	1,827[d]	1,238[d]
Income Before Interest Charges	535	639	1,054	2,016[d]	3,779[d]	4,601[d]	3,558[d]
Interest on Long-Term Debt	195	237	414	643	979	1,400	1,346
Amortization of Debt Disc. Exp. and Premium	2	4	7	7	8	9	9
Other Interest Expense (Net)	21	20	70	110	325	312	317
Total Interest Charges	218	261	491	760	1,312	1,721	1,672
Net Income Before Extraordinary Items	e	e	e	1,256[d]	2,467[d]	2,880[d]	1,886[d]
Extraordinary Items, Less Taxes	c	c	c	0	(141)	0	(129)
Net Income	317	378	563	1,256[d]	2,326[d]	2,880[d]	1,757[d]
Preferred Dividends	33	38	79	79	142	193	164
Common Dividends	184	258	351	600	1,229	2,336	1,984
Note:							
Number of Companies Reporting	48	47	39	33	39	34	38
Op. Rev. of Companies Reporting (Millions)	$3,092	$3,999	$5,729	$11,192	$37,971	$49,459	$41,705

a. "Investment Tax Credit Adjustment" included in "Federal Income Taxes" prior to 1971.
b. Less than $500,000.
c. "Extraordinary Items" included in "Other Income (Non-Operating) (Net)" prior to 1971.
d. Not comparable with prior years due to 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earings of subsidiaries.
e. Not available.
R–Revised.
( ): Denotes negative.
Note: Data not directly comparable from year to year due to acquisitions and mergers. See page ix.

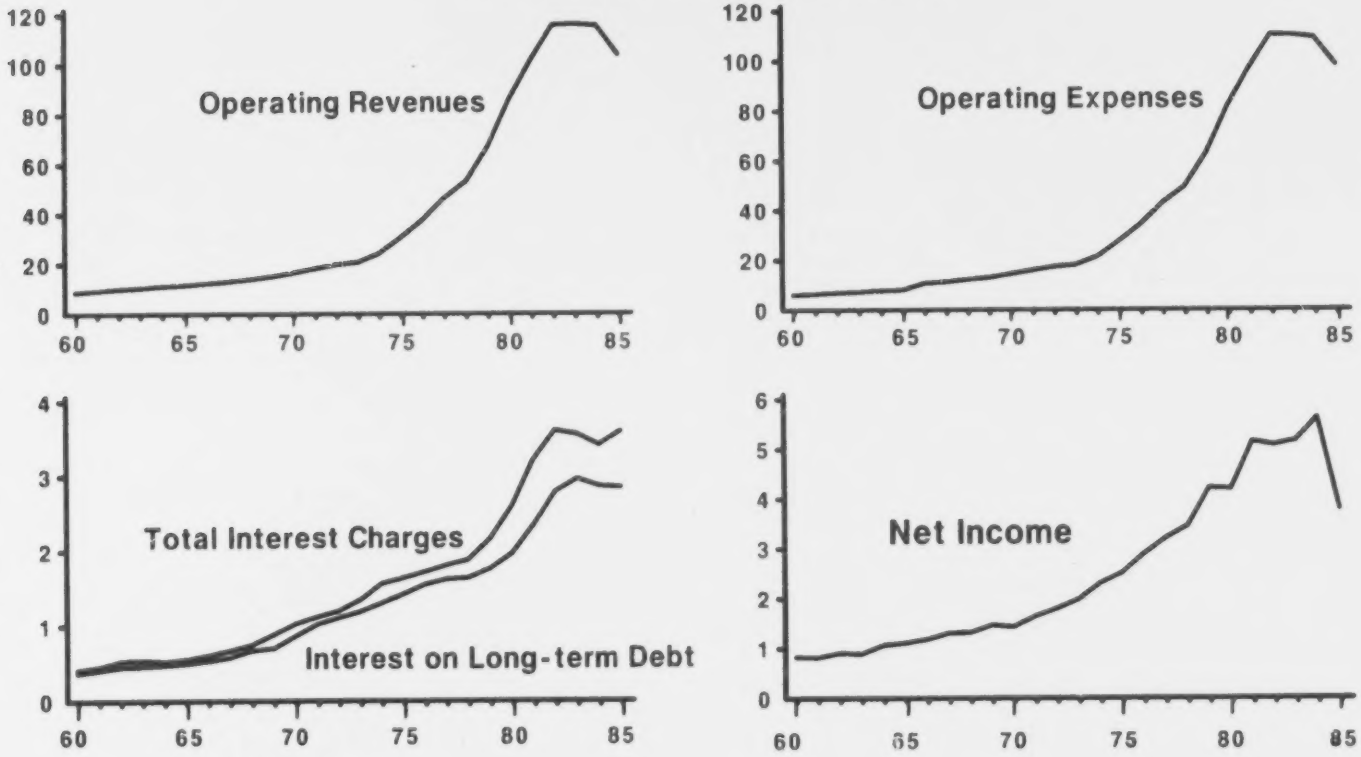
TABLE 12-4
COMPOSITE INCOME ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
INTEGRATED COMPANIES, 1979-1985

(Millions)

	1979	1980	1981	1982	1983	1984	1985
Total Operating Revenues	$14,439	$17,300	$23,612	$27,481	$27,125	$25,599	$17,396
Operation Expenses	12,116	14,870	20,076	23,399	22,806	21,043	14,281
Maintenance Expenses	265	285	417	455	422	432	306
Total Operation and Maintenance Expenses	12,381	15,155	20,493	23,854	23,228	21,475	14,587
Depreciation, Retirements, Depletion, etc.	464	490	617	671	704	682	571
Federal Income Taxes	24	261	220	160	506	714	441
Provision for Deferred Federal Income Taxes	375	221	350	538	382	156	238
Portion of Current Federal Income Taxes Provided For in Prior Years	(85)	(194)	(155)	(276)	(258)	(171)	(204)
Investment Tax Credit Adjustment	37	47	78	125	84	78	57
Other Federal Taxes	48	53	86	103	100	105	79
State Income Taxes	56	50	60	49	95	106	69
Other State and Local Taxes	401	449	781	930	867	905	511
Total Taxes	857	887	1,420	1,629	1,776	1,893	1,191
Total Operating Expenses	13,702	16,532	22,530	26,154	25,708	24,050	16,349
Operating Income	737	768	1,082	1,327	1,417	1,549	1,047
Other Operating Income	11	17	22	21	18	13	11
Allowance for Funds Used During Construction	12	17	18	21	10	9	7
Utility Operating Income	760	802	1,122	1,369	1,445	1,571	1,065
Other Income (Non-Operating) (Net)	433	582	771	606	457	419	162
Income Before Interest Charges	1,193	1,384	1,893	1,975	1,902	1,990	1,227
Interest on Long-Term Debt	356	375	501	606	635	634	501
Amortization of Debt Disc. Exp. and Premium	3	3	3	4	4	5	6
Other Interest Expense (Net)	90	163	239	231	140	119	274
Total Interest Charges	449	541	743	841	779	758	781
Net Income Before Extraordinary Items	744	843	1,150	1,134	1,123	1,232	446
Extraordinary Items, Less Taxes	63	a	(9)	a	a	(30)	25
Net Income	807	843	1,141	1,134	1,123	1,202	471
Preferred Dividends	35	35	49	58	78	127	99
Common Dividends	392	424	618	712	774	846	575
Note:							
Number of Companies Reporting	40	45	48	46	43	42	26
Op. Rev. of Companies Reporting (Millions)	$12,180	$16,020	$22,360	$25,015	$24,309	$22,394	$14,743

a. Less than $500,000.
( ): Denotes negative.
Note: Data not directly comparable from year to year due to acquisitions and mergers. See page ix.

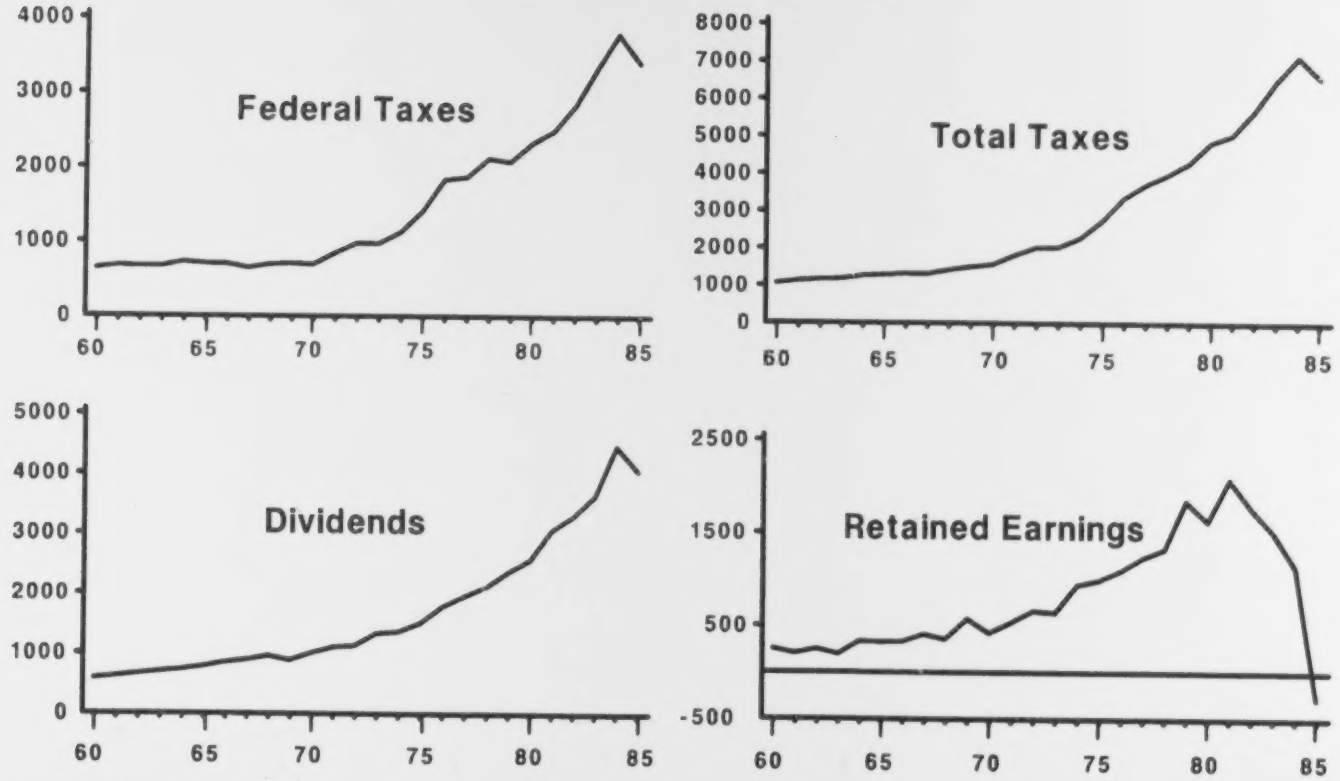
GAS UTILITY INDUSTRY COMPOSITE INCOME ACCOUNTS (INVESTOR-OWNED) BILLIONS OF DOLLARS



REFERENCE: TABLE 12-1

CHART 12-2

GAS UTILITY INDUSTRY DISPOSITION OF NET INCOME AND TAXES
(INVESTOR-OWNED)
MILLIONS OF DOLLARS



REFERENCE: TABLE 12-1

TABLE 12-5
COMPOSITE INCOME ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
COMBINATION COMPANIES, 1979-1985

(Millions)

	1979	1980	1981	1982	1983	1984[R]	1985
Gas Operations							
Total Operating Revenues	$10,806	$13,001	$15,067	$17,692	$18,651	$19,207	$19,301
Operation Expenses	8,737	10,804	12,636	14,778	15,567	15,692	15,641
Maintenance Expenses	262	278	319	339	346	354	379
Total Operation and Maintenance Expenses	8,998	11,082	12,955	15,117	15,913	16,046	16,020
Depreciation, Retirements, Depletion, etc.	346	370	398	443	480	522	567
Federal Income Taxes	167	69	126	145	116	513	393
Provision for Deferred Federal Income Taxes	121	210	218	254	416	250	319
Portion of Current Federal Income Taxes Provided For in Prior Years	(85)	(101)	(159)	(97)	(220)	(309)	(215)
Investment Tax Credit Adjustment	29	36	38	72	76	95	61
Other Federal Taxes	44	47	62	69	74	82	87
State Income Taxes	22	25	20	55	63	82	79
Other State and Local Taxes	493	547	650	729	790	786	813
Total Taxes	790	833	955	1,227	1,315	1,499	1,537
Total Operating Expenses	10,135	12,285	14,308	16,787	17,708	18,067	18,124
Operating Income[a]	671	716	759	905	943	1,140	1,177
Total Operations							
Total Operating Revenues	$36,232	$43,822	$51,085	$56,541	$60,883	$62,035	$63,647
Operation Expenses	22,632	28,511	33,318	35,305	36,987	36,616	36,773
Maintenance Expenses	2,019	2,313	2,561	2,939	3,195	3,852	3,589
Total Operation and Maintenance Expenses	24,651	30,824	35,879	38,244	40,092	39,916	40,362
Depreciation, Retirements, Depletion, etc.	2,349	2,605	2,867	3,299	3,606	3,852	4,210
Federal Income Taxes	350	541	811	1,544	1,324	1,864	1,972
Provision for Deferred Federal Income Taxes	963	1,369	1,534	1,557	2,431	2,502	2,477
Portion of Current Federal Income Taxes Provided For in Prior Years	(334)	(749)	(915)	(1,080)	(981)	(1,129)	(884)
Investment Tax Credit Adjustment	334	305	478	900	847	925	790
Other Federal Taxes	196	228	296	331	360	380	401
State Income Taxes	140	166	199	365	432	538	466
Other State and Local Taxes	2,605	2,911	3,266	3,581	3,998	4,014	4,213
Total Taxes	4,253	4,771	5,669	7,198	8,411	9,095	9,435
Total Operating Expenses	31,253	38,200	44,415	48,741	52,109	52,863	54,007
Operating Income	4,979	5,622	6,670	7,800	8,774	9,172	9,640
Other Operating Income	b	b	1	2	1	1	1
Allowance for Funds Used During Construction	1,231	1,569	1,833	2,247	2,975	2,568	2,578
Utility Operating Income	6,209	7,191	8,504	10,049	11,750	11,741	12,219
Other Income (Non-Operating) (Net)	302	496	605	625	478	745	968
Income Before Interest Charges	6,511	7,687	9,109	10,674	12,228	12,486	13,187
Interest on Long-Term Debt	2,594	3,039	3,544	4,052	4,615	4,718	5,155
Amortization of Debt Disc. Exp. and Premium	15	15	21	28	35	21	53
Other Interest Expense (Net)	188	453	620	567	410	383	302
Total Interest Charges	2,796	3,507	4,185	4,647	5,060	5,122	5,510
Net Income Before Extraordinary Items	3,715	4,180	4,924	6,027	7,168	7,364	7,677
Extraordinary Items, Less Taxes	0	11	1	41	9	15	749
Net Income	3,715	4,191	4,925	6,068	7,177	7,379	6,928
Preferred Dividends	708	801	891	986	1,073	1,022	1,006
Common Dividends	2,183	2,575	2,957	3,526	4,188	4,045	4,388
Note:							
Number of Companies Reporting	58	61	60	59	57	54	55
Total Op. Revenues of Companies Reporting (Millions)	$34,771	$43,636	$50,989	$55,901	$60,231	$60,980	$62,862
Gas Revenues of Companies Reporting (Millions)	$10,370	$12,946	$15,039	$17,492	$18,479	$18,880	$19,063

a. Includes "Other Operating Income" which was less than $500,000 in each year.
b. Less than $500,000.
( ): Denotes negative.
R–Revised.
Note: Data not directly comparable from year to year due to acquisitions and mergers. See page ix.

TABLE 12-6
INVESTOR-OWNED GAS UTILITY INDUSTRY
GAS OPERATION AND MAINTENANCE EXPENSES
BY TYPE OF COMPANY, 1984-1985

(Millions)

Total Industry Type of Expense	1984 Operation	1984 Maintenance	1985 Operation	1985 Maintenance
Purchased Gas Cost and Production Exp.	$85,264	$ 0	$74,482	$ 0
Other Production and Purch. Exp. and Adjustments	745	181	928	181
Production and Purchases, Total	86,009	181	75,410	181
Storage	574	88	603	86
Transmission	3,715	420	3,492	457
Distribution	1,306	822	1,331	836
Customer Accounts	1,491	a	1,470	a
Sales	133	a	160	a
Administrative and General	3,725	68	4,008	70
Customer Service	421	0	468	0
Total	97,374	1,579	86,942	1,630
Distribution Companies Type of Expense	Operation	Maintenance	Operation	Maintenance
Purchased Gas Cost and Production Exp.	$12,450	$ 0	$14,751	$ 0
Other Production and Purch. Exp. and Adjustments	120	11	187	19
Production and Purchases, Total	12,570	11	14,938	19
Storage	27	8	46	13
Transmission	3	1	34	13
Distribution	416	260	539	355
Customer Accounts	519	a	665	a
Sales	57	a	90	a
Administrative and General	716	14	988	20
Customer Service	62	0	87	0
Total	14,370	294	17,387	420
Transmission Companies Type of Expense	Operation	Maintenance	Operation	Maintenance
Purchased Gas Cost and Production Exp.	$41,162	$ 0	$34,484	$ 0
Other Production and Purch. Exp. and Adjustments	269	114	389	111
Production and Purchases, Total	41,431	114	34,873	111
Storage	373	36	391	35
Transmission	3,123	340	2,887	368
Distribution	a	a	a	a
Customer Accounts	12	0	10	0
Sales	14	0	19	0
Administrative and General	1,311	9	1,447	12
Customer Service	5	0	5	0
Total	46,269	499	39,632	526
Integrated Companies Type of Expense	Operation	Maintenance	Operation	Maintenance
Purchased Gas Cost and Production Exp.	$18,043	$ 0	$11,887	$ 0
Other Production and Purch. Exp. and Adjustments	223	38	162	31
Production and Purchases, Total	18,266	38	12,049	31
Storage	107	32	93	26
Transmission	499	55	477	54
Distribution	473	286	328	181
Customer Accounts	530	a	337	a
Sales	50	0	36	a
Administrative and General	936	21	777	14
Customer Service	182	0	184	a
Total	21,043	432	14,281	306
Combination Companies Type of Expense	Operation	Maintenance	Operation	Maintenance
Purchased Gas Cost and Production Exp.	$13,609	$ 0	$13,360	$ 0
Other Production and Purch. Exp. and Adjustments	133	18	190	20
Production and Purchases, Total	13,742	18	13,550	20
Storage	67	12	73	12
Transmission	90	24	94	22
Distribution	417	276	464	300
Customer Accounts	430	0	458	0
Sales	12	0	15	0
Administrative and General	762	24	796	24
Customer Service	172	0	192	0
Total	15,692	354	15,642	378

a. Less than $500,000.
Note: See note previous page.

SECTION 13
BALANCE SHEETS

	1985	% Change 85/84
Gas Utility Plant		
(Millions)		
Total Industry	$86,547	+ 4.1
Distribution	17,383	+45.1
Transmission	39,076	+ 4.9
Integrated	14,203	−25.4
Combination	15,885	+ 7.1
Total Common Equity		
(Millions)		
Total Industry	$36,082	+ 3.4
Distribution	5,624	+47.9
Transmission	18,804	+ 0.8
Integrated	6,632	−20.4
Combination	5,022	+22.3

TABLE 13-1
COMPOSITE BALANCE SHEET ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
TOTAL INDUSTRY, 1960–1985

(Millions)

	1960	1965	1970	1975	1980	1984[R]	1985
ASSETS							
Total Gas Utility Plant	$20,835	$28,205	$38,541	$49,384	$67,071	$83,118	$86,547
Less Accum. Prov. for Depr. and Amort.	4,570	7,205	10,696	16,779	26,162	35,542	36,377
Net Gas Utility Plant (Total)	16,265	21,000	27,845	32,605	40,909	47,576	50,170
Gas Stored Underground (Non-Current)	0	0	0	0	0	0	1,574[a]
Investment and Fund Accounts	1,380	1,885	3,024	9,198[b]	15,530[b]	21,872[b]	23,871[b]
Current and Accrued Assets	2,185	2,545	3,674	7,543	17,243	25,367	24,771
Deferred Debits[c]	170	210	386	940	2,169	4,118	4,092
Total Assets	20,000	25,640	34,929	50,286[b]	75,851[b]	98,933[b]	104,478[b]
LIABILITIES							
Common Stock	3,540	4,360	4,727	5,803	6,968	7,296	7,739
Retained Earnings	1,880	2,715	4,230	7,911[b]	13,122[b]	18,925[b]	18,893[b]
Other Paid-in Capital[d]	1,045	1,390	2,063	3,245	5,597	8,680	9,450
Total Common Equity	6,465	8,465	11,020	16,959[b]	25,687[b]	34,901[b]	36,082[b]
Preferred Stock	1,345	1,540	1,945	2,541	3,628	4,058	3,435
Total Capital Stock	7,810	10,005	12,965	19,500[b]	29,315[b]	38,959[b]	39,517[b]
Bonds	6,265	7,525	9,248	10,493	9,574	8,987	9,378
Debentures	1,445	2,560	4,274	5,174	5,819	8,568	7,739
Other Long-Term Debt	1,420	1,430	2,159	3,877	6,674	7,944	9,165
Total Long-Term Debt	9,130	11,515	15,681	19,544	22,067	25,499	26,282
Total Capitalization	16,940	21,520	28,646	39,044[b]	51,382[b]	64,458[b]	65,799[b]
Current and Accrued Liabilities	2,420	3,035	4,832	8,158	18,119	23,043	26,125
Deferred Credits	85	215	370	752	1,683	3,577	3,779
Non-Current Liabilities[e]	110	55	48	194	428	789	879
Contributions in Aid of Construction	95	155	245	86	90	120	127
Accumulated Deferred Income Taxes[f]	350	660	788	2,052	4,149	6,946	7,769
Total Liabilities	20,000	25,640	34,929	50,286[b]	75,851[b]	98,933[b]	104,478

a. First year this category is broken out.
b. Not comparable with 1970 and prior years due to a 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries.
c. Includes "Capital Stock Discount and Expense."
d. Includes accounts formerly detailed in "Premiums, Assessments, etc." and "Capital Surplus."
e. Formerly called "Operating Reserves."
f. Includes "Reserves for Deferred Income Taxes."
R–Revised.
Note: Data not directly comparable from year to year due to acquisitions and mergers. See page ix.

TABLE 13-2
COMPOSITE BALANCE SHEET ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
DISTRIBUTION COMPANIES, 1979-1985

(Millions)

	1979[a]	1980	1981	1982	1983	1984	1985
ASSETS							
Total Gas Utility Plant	$10,166	$10,990	$9,188	$9,755	$11,042	$11,980	$17,383
Less Accum. Prov. for Depr. and Amort.	2,892	3,174	2,799	3,067	3,558	3,971	5,631
Net Gas Utility Plant (Total)	7,274	7,816	6,389	6,688	7,484	8,009	11,752
Gas Stored Underground (Non-Current)	0	0	0	0	0	0	124[a]
Investment and Fund Accounts	464	459	454	523	564	659	1,136
Current and Accrued Assets	2,454	3,086	2,877	3,043	3,890	3,317	4,864
Deferred Debits	191	129	105	192	214	180	334
Total Assets	10,383	11,490	9,825	10,446	12,152	12,165	18,210
LIABILITIES							
Common Stock	1,108	1,119	837	925	974	805	1,205
Retained Earnings	1,531	1,630	1,349	1,425	1,669	1,921	2,917
Other Paid-in Capital	519	556	554	623	860	1,076	1,502
Total Common Equity	3,158	3,305	2,740	2,973	3,503	3,802	5,624
Preferred Stock	378	412	257	268	338	336	441
Total Capital Stock	3,536	3,717	2,997	3,241	3,841	4,138	6,065
Bonds	2,125	2,210	1,686	1,666	1,928	1,950	2,756
Debentures	121	98	126	123	309	345	537
Other Long-Term Debt	874	848	764	979	795	839	1,171
Total Long-Term Debt	3,120	3,156	2,576	2,768	3,032	3,134	4,464
Total Capitalization	6,656	6,873	5,573	6,009	6,873	7,272	10,529
Current and Accrued Liabilities	2,701	3,384	3,168	3,201	3,767	3,294	5,054
Deferred Credits	350	461	407	470	570	642	969
Non-Current Liabilities[b]	23	28	19	18	22	28	54
Contributions in Aid of Construction	54	65	57	60	62	67	116
Accumulated Deferred Income Taxes[c]	599	679	601	688	858	862	1,488
Total Liabilities	10,383	11,490	9,825	10,446	12,152	12,165	18,210

a. First year this category is broken out.
b. Formerly called "Operating Reserves."
c. Includes "Reserves for Deferred Income Taxes."
Note: Data not directly comparable from year to year due to acquisitions and mergers. See page ix.

TABLE 13-3
COMPOSITE BALANCE SHEET ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
TRANSMISSION COMPANIES, 1960-1985

(Millions)

	1960	1965	1970	1975	1980	1984	1985
ASSETS							
Total Gas Utility Plant	$8,960	$11,505	$16,363	$20,351	$30,334	$37,268	$39,076
Less Accum. Prov. for Depr. and Amort.	2,040	3,375	5,311	8,636	14,361	19,522	21,126
Net Gas Utility Plant (Total)	6,920	8,130	11,052	11,714	15,973	17,746	17,950
Gas Stored Underground (Non-Current)	0	0	0	0	0	0	868[a]
Investment and Fund Accounts	870	1,060	1,889	6,791[b]	11,998[b]	14,743[b]	14,914[b]
Current and Accrued Assets	840	950	1,384	3,459	8,432	15,131	14,494
Deferred Debits[c]	65	100	192	516	1,371	2,551	2,311
Total Assets	8,695	10,240	14,517	22,480[b]	37,774[b]	50,171[b]	50,537[b]
LIABILITIES							
Common Stock	1,105	1,225	1,477	1,984	2,610	2,678	2,694
Retained Earnings	665	815	1,430	4,010[b]	7,984[b]	11,257[b]	11,102[b]
Other Paid-in Capital[d]	570	770	1,233	1,891	3,414	4,729	5,008
Total Common Equity	2,340	2,810	4,140	7,885[b]	14,008[b]	18,664[b]	18,804[b]
Preferred Stock	640	715	1,019	1,012	1,734	1,858	1,361
Total Capital Stock	2,980	3,525	5,159	8,897[b]	15,742[b]	20,522[b]	20,165[b]
Bonds	3,030	3,060	3,458	3,125	2,398	990	900
Debentures	770	1,545	2,569	3,124	3,732	5,578	5,529
Other Long-Term Debt	590	420	841	2,167	4,114	4,825	5,117
Total Long-Term Debt	4,390	5,025	6,868	8,415	10,244	11,393	11,546
Total Capitalization	7,370	8,550	12,027	17,312[b]	25,986[b]	31,915[b]	31,711[b]
Current and Accrued Liabilities	1,005	1,200	1,974	3,802	9,067	12,654	13,028
Deferred Credits	10	65	147	295	495	1,364	998
Non-Current Liabilities[e]	65	15	14	113	174	531	580
Contributions in Aid of Construction	15	20	14	0	0	0	5
Accumulated Deferred Income Taxes[f]	230	390	341	959	2,052	3,707	4,215
Total Liabilities	8,695	10,240	14,517	22,480[b]	37,774[b]	50,171[b]	50,537[b]

a. First year this category is broken out.
b. Not comparable with 1970 and prior years due to a 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries.
c. Includes "Capital Stock Discount and Expense."
d. Includes accounts formerly detailed in "Premiums, Assessments, etc." and "Capital Surplus."
e. Formerly called "Operating Reserves."
f. Includes "Reserves for Deferred Income Taxes."

Note: Data not directly comparable from year to year due to acquisitions and mergers. See page ix.

TABLE 13-4
COMPOSITE BALANCE SHEET ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
INTEGRATED COMPANIES, 1979-1985

(Millions)

	1979	1980	1981	1982	1983	1984	1985
ASSETS							
Total Gas Utility Plant	$13,551	$13,756	$17,776	$19,190	$19,284	$19,033	$14,203
Less Accum. Prov. for Depr. and Amort.	4,725	4,913	6,102	6,631	6,902	6,875	5,743
Net Gas Utility Plant (Total)	8,826	8,843	11,674	12,559	12,382	12,158	8,460
Gas Stored Underground (Non-Current)	0	0	0	0	0	0	442[a]
Investment and Fund Accounts	2,603	2,556	3,702	4,833	5,192	6,057	7,354
Current and Accrued Assets	3,558	4,456	5,127	5,975	6,371	5,315	3,726
Deferred Debits	384	453	517	773	628	447	538
Total Assets	15,370	16,608	21,020	24,140	24,573	23,977	20,520
LIABILITIES							
Common Stock	1,758	1,916	2,293	2,232	2,351	2,174	1,808
Retained Earnings	2,484	2,440	3,420	4,107	4,056	4,252	3,058
Other Paid-in Capital	825	906	1,120	1,255	1,780	1,903	1,766
Total Common Equity	5,067	5,262	6,833	7,594	8,187	8,329	6,632
Preferred Stock	448	423	606	722	690	770	439
Total Capital Stock	5,515	5,685	7,439	8,316	8,877	9,099	7,071
Bonds	1,667	1,605	2,247	2,331	2,386	2,307	1,352
Debentures	1,763	1,891	2,194	2,448	2,526	2,546	1,537
Other Long-Term Debt	1,163	1,329	1,429	1,810	1,611	1,538	1,940
Total Long-Term Debt	4,593	4,825	5,870	6,589	6,523	6,391	4,829
Total Capitalization	10,108	10,510	13,309	14,905	15,400	15,490	11,900
Current and Accrued Liabilities	3,852	4,454	5,627	6,625	6,516	5,731	6,401
Deferred Credits	328	381	561	785	726	938	982
Non-Current Liabilities[b]	146	220	104	283	83	83	133
Contributions in Aid of Construction	19	21	37	43	51	48	c
Accumulated Deferred Income Taxes[d]	917	1,022	1,382	1,499	1,797	1,687	1,104
Total Liabilities	15,370	16,608	21,020	24,140	24,573	23,977	20,520

a. First year this category is broken out.
b. Formerly called "Operating Reserves."
c. Less than $500,000.
d. Includes "Reserves for Deferred Income Taxes."
Note: Data not directly comparable from year to year due to acquisitions and mergers. See page ix.

TABLE 13-5
COMPOSITE BALANCE SHEET ACCOUNTS
INVESTOR-OWNED GAS UTILITY INDUSTRY
COMBINATION COMPANIES, 1979-1985

(Millions)

	1979	1980	1981	1982	1983	1984[R]	1985
ASSETS							
Electric	$84,564	$94,579	$103,460	$114,620	$130,259	$127,337	$107,117
Gas	11,340	11,991	12,846	13,760	14,385	14,837	15,552
Other	2,770	3,614	3,950	4,366	4,759	5,102	5,338
Total Utility Plant	98,674	110,184	120,256	132,746	149,403	147,276	128,007
Construction Work in Progress	0	0	0	0	0	0	32,611[a]
Less Accum. Prov. for Depr. and Amort.	22,142	24,846	27,569	30,496	33,971	35,225	38,898
Net Utility Plant	76,532	85,338	92,687	102,250	115,432	112,051	121,720
Gas Stored Underground (Non-Current)	0	0	0	0	0	0	140[b]
Investment and Fund Accounts	1,944	1,998	2,647	3,224	3,894	4,098	4,686
Current and Accrued Assets	10,109	11,659	12,562	13,556	14,615	15,923	16,921
Deferred Debits	1,715	1,983	2,597	3,284	4,474	9,335	9,124
Total Assets	90,301	100,978	110,493	122,314	138,415	141,407	152,591
LIABILITIES							
Common Stock	12,360	13,386	13,997	15,974	17,899	18,364	20,382
Retained Earnings	9,807	10,803	11,880	13,382	15,493	16,754	18,218
Other Paid-in Capital	5,932	7,301	8,686	10,047	11,777	10,887	11,780
Total Common Equity	28,099	31,490	34,483	39,403	45,169	46,005	50,380
Preferred Stock	9,739	10,719	11,244	11,903	13,234	12,258	11,980
Total Capital Stock	37,837	42,209	45,727	51,306	58,403	58,263	62,360
Bonds	31,252	34,010	35,632	38,912	42,284	41,905	43,834
Debentures	1,025	990	787	805	785	1,103	1,361
Other Long-Term Debt	3,186	3,871	4,889	5,947	8,010	8,317	9,394
Total Long-Term Debt	35,464	38,871	41,308	45,664	51,079	51,325	54,589
Total Capitalization	73,301	81,080	87,035	96,970	109,482	109,588	116,949
Current and Accrued Liabilities	10,517	12,286	14,338	14,172	14,929	15,285	16,477
Deferred Credits	2,970	3,506	4,126	5,427	6,237	7,091	8,326
Non-Current Liabilities[c]	81	58	67	108	113	1,644	1,123
Contribution in Aid of Construction	26	38	50	52	57	61	64
Accumulated Deferred Income Taxes[d]	3,407	4,101	4,877	5,585	7,597	7,738	9,652
Total Liabilities	90,301	100,978	110,493	122,314	138,415	141,407	152,591

a. Formerly included under the corresponding plant category.
b. First year this category is broken out.
c. Formerly called "Operating Reserves."
d. Includes "Reserves for Deferred Income Taxes."
R–Revised.
Note: Data not directly comparable from year to year due to acquisitions and mergers. See page ix.

TABLE 13-6
TOTAL GAS UTILITY INDUSTRY PLANT BY TYPE OF COMPANY AND BY PLANT FUNCTION, 1960–1985

(Millions)

	1960	1965	1970	1975	1980	1984	1985
Total Industry							
Total Gas Utility Plant	**$21,525**	**$29,175**	**$39,914**	**$51,004**	**$69,275**	**$85,182**	**$88,717**
Production	2,925	3,180	3,657	4,776	8,199	10,314	10,511
Underground Storage	755	1,200	1,816	2,697	4,529	5,475	4,305
Other Storage	a	a	a	700	672	736	717
LNG	b	b	b	b	284	350	262
Transmission	9,410	12,435	17,188	20,530	25,418	31,186	33,969
Distribution	7,275	10,660	15,056	19,151	24,923	31,575	33,397
General and Intangible[c]	835	1,090	1,518	2,226	3,470	4,329	4,438
Construction Work in Progress	325	610	679	924	1,780	1,217	1,118
Total Investor-Owned Industry							
Total Gas Utility Plant	**$20,835**	**$28,205**	**$38,541**	**$49,384**	**$67,071**	**$83,118**	**$86,547**
Production	2,835	3,055	3,529	4,687	8,019	10,153	10,347
Underground Storage	755	1,190	1,770	2,639	4,451	5,451	4,286
Other Storage	a	a	a	648	632	637	617
LNG	b	b	b	b	273	328	241
Transmission	9,405	12,425	17,170	20,307	25,298	31,145	33,930
Distribution	6,750	9,935	13,989	18,080	23,343	30,184	31,906
General and Intangible[c]	785	1,020	1,451	2,125	3,334	4,047	4,155
Construction Work in Progress	305	580	632	896	1,721	1,173	1,065
Distribution Companies							
Total Gas Utility Plant	b	b	b	**$8,547**	**$10,990**	**$11,980**	**$17,383**
Production	b	b	b	387	539	346	656
Underground Storage	b	b	b	460	627	470	572
Other Storage	b	b	b	172	140	148	200
LNG	b	b	b	c	91	62	151
Transmission	b	b	b	425	338	155	581
Distribution	b	b	b	6,452	8,569	9,874	13,720
General and Intangible[c]	b	b	b	479	599	842	1,308
Construction Work in Progress	b	b	b	173	87	83	195
Transmission Companies							
Total Gas Utility Plant	**$8,960**	**$11,505**	**$16,363**	**$20,351**	**$30,334**	**$37,268**	**$39,076**
Production	1,430	1,570	1,842	2,650	5,098	6,449	7,204
Underground Storage	280	325	668	1,299	2,340	3,201	2,325
Other Storage	a	a	a	113	175	139	143
LNG	b	b	b	b	160	189	41
Transmission	6,880	9,040	13,238	15,322	20,194	25,296	27,400
Distribution	35	5	2	5	7	1	6
General and Intangible[c]	220	260	330	587	1,204	1,446	1,583
Construction Work in Progress	115	305	283	375	1,156	547	374
Integrated Companies							
Total Gas Utility Plant	b	b	b	**$10,960**	**$13,756**	**$19,033**	**$14,203**
Production	b	b	b	1,240	1,914	2,833	1,937
Underground Storage	b	b	b	531	961	1,152	916
Other Storage	b	b	b	62	103	125	85
LNG	b	b	b	b	14	69	5
Transmission	b	b	b	3,418	3,308	3,779	4,026
Distribution	b	b	b	4,809	6,191	9,682	6,338
General and Intangible[c]	b	b	b	748	1,029	1,135	733
Construction Work in Progress	b	b	b	151	236	258	163
Combination Companies							
Total Gas Utility Plant	b	b	b	**$9,526**	**$11,991**	**$14,837**	**$15,885**
Production	b	b	b	410	468	525	550
Underground Storage	b	b	b	348	523	628	473
Other Storage	b	b	b	301	214	225	189
LNG	b	b	b	b	8	8	44
Transmission	b	b	b	1,144	1,458	1,915	1,923
Distribution	b	b	b	6,816	8,576	10,627	11,842
General and Intangible[c]	b	b	b	310	502	624	531
Construction Work in Progress	b	b	b	197	242	285	333

a. Included in "Production."
b. Not available.
c. Includes plant acquisition adjustments and plant adjustments.
R–Revised.
Note: Data not directly comparable from year to year due to acquisitions and mergers. See page ix.

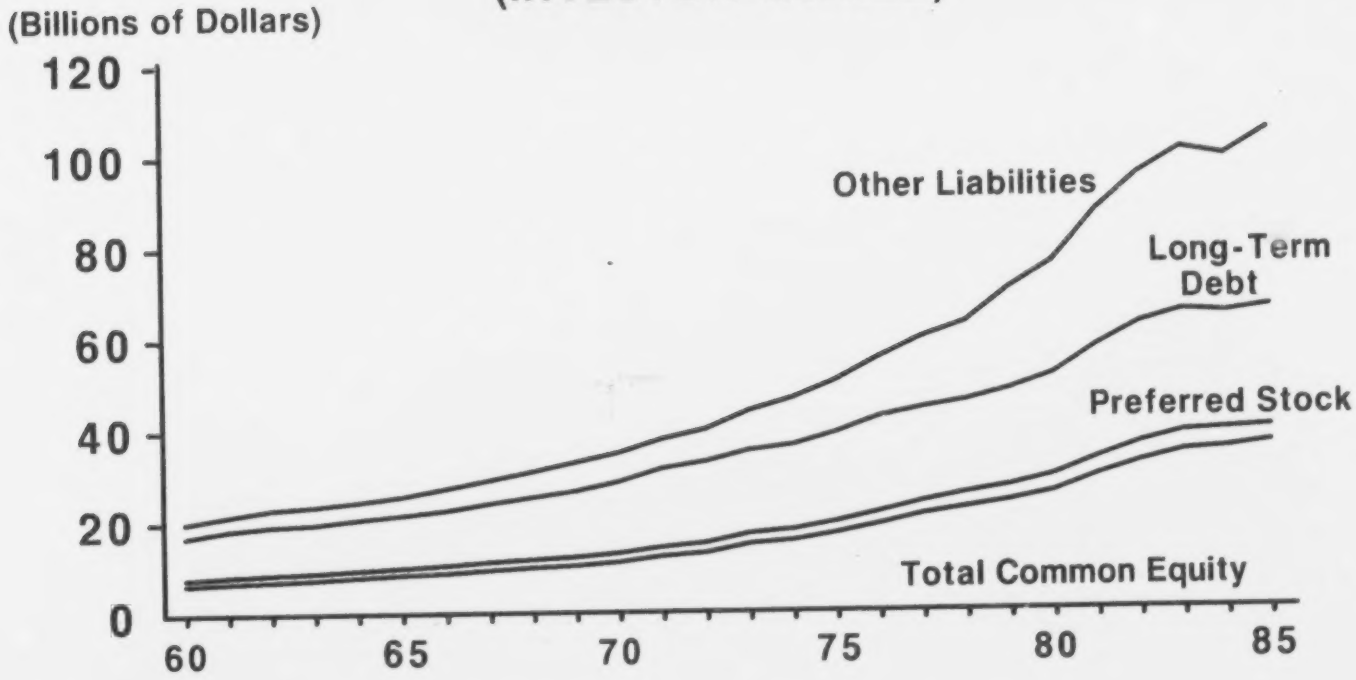
SECTION 14
ANALYTICAL RATIOS

	1985	% Change 85/84
Capitalization Represented by (%)		
Long-term Debt	40.0	+ 8.4
Preferred Stock	5.2	−17.5
Common Equity	54.8	+ 1.3

The analytical ratios in this section have been calculated on a consistent basis for all years. These ratios are considered to be an acceptable set of indicators which provide trends on the condition of the investor-owned gas utility industry. Please contact the statistics department at A.G.A. for details of the formulas used to calculate these analytical ratios.

CHART 13-1

GAS UTILITY INDUSTRY INVESTMENT (INVESTOR-OWNED)



REFERENCE: TABLE 13-1

TABLE 14-1
SELECTED COMPOSITE ANALYTICAL RATIOS
INVESTOR-OWNED GAS UTILITY INDUSTRY
TOTAL INDUSTRY, 1960-1985

	1960	1965	1970	1975	1980	1984	1985
Earnings							
Utility Operating Income as % of Total Plant	5.5	5.3	5.6	6.5	6.7	8.0	7.0
Utility Operating Income as % of Net Plant	7.0	7.2	7.8	9.9	10.9	14.0	12.0
Operating Revenue as % of Total Plant	41.7	40.9	42.5	61.9	128.1	138.9	120.1
Common Dividend Payout Ratio	67.3	68.3	67.6	57.2[a]	58.2[a]	77.7[a]	108.2[a]
Return on Common Equity	11.8	12.2	11.8	13.7[a]	15.2[a]	14.7[a]	9.3[a]
Return on Average Common Equity	12.2	12.5	12.2	14.3	15.8	14.9	9.5
Return on Net Plant	4.7	4.9	4.7	7.1	9.5	10.8	6.7
Pretax Coverage of:							
Total Interest Expense[b]	4.5	4.2	3.0	3.3	3.5	3.7	3.0
Long-Term Debt Interest Expense[b]	5.0	4.7	3.6	3.8	4.6	4.4	3.8
Allowance for Funds Used During Construction as % of Net Income	3.0	3.1	5.1	5.2	7.6	5.4	7.0
Expenses							
Operating Expenses as % of Operating Revenue	87.2	87.3	87.3	90.0	95.2	94.5	94.6
Maintenance Expenses as % of Total Plant	1.3	1.1	1.1	1.4	1.8	1.9	1.9
Depreciation Expenses as % of Total Plant	2.8	2.8	2.9	3.6	3.6	3.7	3.7
Depreciation Expenses as % of Depreciable Plant	c	c	c	3.6	4.1	3.9	3.7
Total Taxes as % of Total Plant	5.1	4.6	4.1	5.6	7.2	8.6	7.6
Total Taxes as % of Net Plant	6.5	6.2	5.6	8.5	11.8	15.0	13.1
Total Taxes as % of Net Income plus Total Taxes	56.0	52.4	52.5	53.9[a]	53.6[a]	56.0[a]	63.5[a]
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[d]	39.4	36.4	29.8	30.4[a]	27.4[a]	37.1[a]	40.0[a]
Plant							
Total Plant as % of Total Operating Revenue	239.6	244.7	235.3	161.6	78.1	72.0	83.3
Net Plant as % of Total Operating Revenue	187.0	182.2	170.0	106.7	47.6	41.2	48.3
Depreciation Reserve as % of Total Plant	21.9	25.5	27.8	34.0	39.0	42.8	42.0
Depreciation Reserve as % of Depreciable Plant	c	c	c	35.8	44.0	44.9	43.1
Total Plant per Employee ($000)	100.9	137.1	182.1	251.6	328.1	397.9	423.2
Capitalization							
Long-term Debt as % of Net Plant	56.1	54.8	56.3	59.4	53.9	53.6	52.4
% Total Capitalization Represented by:							
a. Long-term Debt	53.9	53.5	54.7	50.1	42.9	39.6	40.0
b. Preferred Stock	7.9	7.2	6.8	6.5	7.1	6.3	5.2
c. Common Equity	38.2	39.3	38.5	43.4	50.0	54.1	54.8
% Current Year Financing of Construction Expenditures Represented by:							
a. Internal Sources	c	c	c	53.8	55.3	67.2	71.8
b. Equity Issues	c	c	c	11.9	11.2	9.0	7.9
c. Debt Issues	c	c	c	34.3	33.5	23.8	20.3

a. Not comparable with 1970 and prior years due to a 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries.
b. Reflects pre-federal income tax coverage.
c. Not available.
d. Includes "Investment Tax Credit Adjustment."

TABLE 14-2
SELECTED COMPOSITE ANALYTICAL RATIOS
INVESTOR-OWNED GAS UTILITY INDUSTRY
DISTRIBUTION COMPANIES, 1979-1985

	1979	1980	1981	1982	1983	1984	1985
Earnings							
Utility Operating Income as % of Total Plant	7.5	6.9	7.2	6.9	7.4	7.7	7.3
Utility Operating Income as % of Net Plant	10.4	9.7	10.4	10.0	10.9	11.5	10.7
Operating Revenue as % of Total Plant	115.7	127.5	138.5	150.2	151.6	145.0	123.7
Common Dividend Payout Ratio	67.8	78.0	72.6	73.2	67.1	67.1	81.3
Return on Common Equity	15.5	12.8	12.4	11.8	14.0	15.7	14.0
Return on Average Common Equity	16.1	13.1	12.9	12.3	15.1	16.3	a
Return on Net Plant	6.8	5.4	5.3	5.2	6.6	7.4	6.7
Pretax Interest Coverage of:							
Total Interest Expense[b]	3.7	3.1	2.6	2.6	3.3	3.8	3.6
Long-Term Debt Interest Expense[b]	4.5	4.0	3.8	3.3	3.9	4.5	4.3
Allowance for Funds Used During Construction as % of Net Income	1.0	1.8	4.7	4.3	2.3	1.8	1.1
Expenses							
Operating Expenses as % of Operating Revenue	93.6	94.6	94.9	95.5	95.2	94.8	94.2
Maintenance Expenses as % of Total Plant	2.3	2.3	2.2	2.2	2.5	2.5	2.4
Depreciation Expenses as % of Total Plant	3.1	3.1	3.2	3.2	3.4	3.3	3.3
Depreciation Expenses as % of Depreciable Plant	3.2	3.2	3.2	3.3	3.4	3.4	3.4
Total Taxes as % of Total Plant	10.4	10.3	9.3	9.7	11.2	11.7	10.8
Total Taxes as % of Net Plant	14.5	14.5	13.4	14.1	16.5	17.5	16.0
Total Taxes as % of Net Income plus Total Taxes	67.1	71.5	70.4	71.7	70.3	69.1	69.4
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[c]	31.8	35.2	28.9	29.9	28.8	40.6	33.4
Plant							
Total Plant as % of Total Operating Revenue	86.4	78.4	72.2	66.6	66.0	69.0	80.8
Net Plant as % of Total Operating Revenue	61.8	55.8	50.2	45.6	44.7	46.1	54.6
Depreciation Reserve as % of Total Plant	28.5	28.9	30.5	31.4	32.2	33.1	32.4
Depreciation Reserve as % of Depreciable Plant	29.4	30.3	31.1	32.0	32.8	33.9	33.2
Total Plant per Employee ($000)	200.1	210.5	219.5	234.1	241.4	259.2	281.3
Capitalization							
Long-term Debt as % of Net Plant	42.9	40.4	40.3	41.4	40.5	39.1	38.0
% Total Capitalization Represented by:							
a. Long-term Debt	46.9	45.9	46.2	46.0	44.1	43.1	42.4
b. Preferred Stock	5.7	6.0	4.6	4.5	4.9	4.6	4.2
c. Common Equity	47.7	48.1	49.2	49.5	51.0	52.3	53.4
% Current Year Financing of Construction Expenditures Represented by:							
a. Internal Sources	61.3	44.9	49.2	55.0	65.2	78.0	73.1
b. Equity Issues	18.1	0.5	12.8	22.6	14.8	7.3	4.9
c. Debt Issues	20.6	54.6	38.0	22.4	20.0	14.7	22.0

a. Not available.
b. Reflects pre-federal income tax coverage.
c. Includes "Investment Tax Credit Adjustment."

TABLE 14-3
SELECTED COMPOSITE ANALYTICAL RATIOS
INVESTOR-OWNED GAS UTILITY INDUSTRY
TRANSMISSION COMPANIES, 1960-1985

	1960	1965	1970	1975	1980	1984	1985
Earnings							
Utility Operating Income as % of Total Plant	5.6	4.9	5.3	6.8	6.7	7.4	5.9
Utility Operating Income as % of Net Plant	7.3	7.0	7.8	11.7	12.7	15.6	12.9
Operating Revenue as % of Total Plant	35.6	35.5	36.2	58.5	137.2	143.1	117.0
Common Dividend Payout Ratio	64.8	75.9	72.5	50.9[a]	56.3[a]	86.9[a]	124.5[a]
Return on Common Equity	12.1	12.1	11.7	14.9[a]	15.6[a]	14.4[a]	8.5[a]
Return on Average Common Equity	12.7	12.3	12.1	15.8	16.4	14.4	8.5
Return on Net Plant	4.1	4.2	4.4	10.1	13.8	15.1	8.9
Pretax Coverage of:							
Total Interest Expense[b]	3.5	3.3	2.5	3.6	3.9	3.6	2.9
Long-Term Debt Interest Expense[b]	3.9	3.6	3.0	4.3	5.2	4.5	3.7
Allowance for Funds Used During Construction of % of Net Income	3.5	4.8	4.3	3.0	5.4	1.4	2.5
Expenses							
Operating Expenses as % of Operating Revenue	84.6	86.5	85.8	88.8	95.4	94.9	95.3
Maintenance Expenses as % of Total Plant	0.7	0.7	0.7	0.9	1.3	1.3	1.3
Depreciation Expenses as % of Total Plant	3.2	3.1	3.1	4.4	4.1	3.9	3.8
Depreciation Expenses as % of Depreciable Plant	c	c	c	4.4	4.5	4.1	3.8
Total Taxes as % of Total Plant	3.6	3.1	2.3	5.0	6.6	6.3	5.1
Total Taxes as % of Net Plant	4.6	4.4	3.4	8.6	12.5	13.3	11.0
Total Taxes as % of Net Income plus Total Taxes	50.2	48.4	40.0	44.6[a]	46.1[a]	45.0[a]	53.0[a]
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[d]	34.0	35.9	26.2	35.6[a]	28.4[a]	28.9[a]	39.6[a]
Plant							
Total Plant as % of Total Operating Revenue	280.9	281.4	276.0	171.0	72.9	69.9	85.4
Net Plant as % of Total Operating Revenue	216.9	198.9	186.4	98.5	38.4	33.3	39.2
Depreciation Reserve as % of Total Plant	22.8	29.3	32.5	42.4	47.3	52.4	54.1
Depreciation Reserve as % of Depreciable Plant	c	c	c	43.8	52.1	55.2	55.5
Total Plant per Employee ($000)	285.4	388.7	505.0	547.1	673.1	789.6	844.0
Capitalization							
Long-term Debt as % of Net Plant	63.4	61.8	62.1	71.8	64.1	64.2	64.3
% Total Capitalization Represented by:							
a. Long-term Debt	59.6	58.8	57.1	48.6	39.4	35.7	36.4
b. Preferred Stock	8.7	8.4	8.5	5.8	6.7	5.8	4.3
c. Common Equity	31.8	32.9	34.4	45.5	53.9	58.5	59.3
% Current Year Financing of Construction Expenditures Represented by:							
a. Internal Sources	c	c	c	55.4	65.1	78.6	75.9
b. Equity Issues	c	c	c	3.7	6.0	1.1	0.0
c. Debt Issues	c	c	c	40.9	28.9	20.3	24.1

a. Not comparable with 1970 and prior years due to a 1973 Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries.
b. Reflects pre-federal income tax coverage.
c. Not available.
d. Includes "Investment Tax Credit Adjustment."

TABLE 14-4
SELECTED COMPOSITE ANALYTICAL RATIOS
INVESTOR-OWNED GAS UTILITY INDUSTRY
INTEGRATED COMPANIES, 1979-1985

	1979	1980	1981	1982	1983	1984	1985
Earnings							
Utility Operating Income as % of Total Plant	5.6	5.8	6.3	7.1	7.5	8.3	7.5
Utility Operating Income as % of Net Plant	8.6	9.1	9.6	10.9	11.7	12.9	12.6
Operating Revenue as % of Total Plant	106.5	125.8	132.8	143.2	140.7	134.5	122.5
Common Dividend Payout Ratio	50.8	52.5	56.6	66.2	74.1	78.7	154.6
Return on Common Equity	15.2	15.4	16.0	14.2	12.8	13.1	5.6
Return on Average Common Equity	15.8	15.6	17.0	14.9	13.2	13.0	a
Return on Net Plant	8.7	9.1	9.4	8.6	8.4	8.8	4.4
Pretax Coverage of:							
Total Interest Expense[b]	3.4	3.2	3.2	3.0	3.4	3.7	2.3
Long-Term Debt Interest Expense[b]	4.3	4.6	4.8	4.2	4.1	4.4	3.5
Allowance for Funds Used During Construction as % of Net Income	1.5	2.0	1.6	1.8	0.9	0.7	1.5
Expenses							
Operating Expenses as % of Operating Revenue	94.9	95.6	95.4	95.2	94.8	93.9	94.0
Maintenance Expenses as % of Total Plant	2.0	2.1	2.3	2.4	2.2	2.3	2.2
Depreciation Expenses as % of Total Plant	3.4	3.6	3.5	3.5	3.7	3.6	4.0
Depreciation Expenses as % of Depreciable Plant	3.7	4.4	3.7	3.7	3.9	3.8	4.0
Total Taxes as % of Total Plant	6.3	6.4	8.0	8.5	9.2	9.9	8.4
Total Taxes as % of Net Plant	9.7	10.0	12.2	13.0	14.3	15.6	14.1
Total Taxes as % of Net Income plus Total Taxes	51.5	51.3	55.4	59.0	61.3	61.2	71.7
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[c]	7.0	26.8	20.7	20.1	34.4	39.7	51.4
Plant							
Total Plant as % of Total Operating Revenue	93.9	79.5	75.3	69.8	71.1	74.4	81.6
Net Plant as % of Total Operating Revenue	61.1	51.1	49.4	45.7	45.7	47.5	48.6
Depreciation Reserve as % of Total Plant	34.9	35.7	34.3	34.6	35.8	36.1	40.4
Depreciation Reserve as % of Depreciable Plant	38.1	43.8	36.8	36.8	38.0	38.4	40.6
Total Plant per Employee ($000)	239.4	249.8	255.5	259.0	275.1	289.7	328.0
Capitalization							
Long-term Debt as % of Net Plant	52.0	54.6	50.3	52.5	52.7	52.6	37.1
% Total Capitalization Represented by:							
a. Long-term Debt	45.4	45.9	44.1	44.2	42.4	41.2	40.6
b. Preferred Stock	4.4	4.0	4.6	4.8	4.5	5.0	3.7
c. Common Equity	50.1	50.1	51.3	51.0	53.2	53.8	55.7
% Current Year Financing of Construction Expenditures Represented by:							
a. Internal Sources	74.9	62.0	64.7	48.5	69.3	78.5	89.7
b. Equity Issues	1.3	2.6	7.8	3.8	9.7	5.3	3.0
c. Debt Issues	23.8	35.4	27.5	47.7	21.0	16.2	7.3

a. Not available.
b. Reflects pre-federal income tax coverage.
c. Includes "Investment Tax Credit Adjustment."

TABLE 14-5
SELECTED COMPOSITE ANALYTICAL RATIOS
INVESTOR-OWNED GAS UTILITY INDUSTRY
COMBINATION COMPANIES, 1979-1985

	1979	1980	1981	1982	1983	1984	1985
Gas Operations							
Earnings							
Utility Operating Income as % of Total Plant	7.1	7.4	7.4	8.2	8.4	9.3	8.7
Utility Operating Income as % of Net Plant	10.3	10.7	10.8	12.2	12.7	14.3	11.5
Operating Revenue as % of Total Plant	95.3	108.4	117.3	128.6	129.7	129.5	121.5
Common Dividend Payout Ratio	52.4	59.0	64.1	57.9	62.0	52.7	71.6
Return on Common Equity	14.4	15.5	14.8	17.2	17.0	19.2	12.0
Return on Average Common Equity	15.2	15.9	15.3	17.9	17.4	19.8	13.2
Return on Net Plant	5.4	5.8	5.6	6.8	6.8	8.1	5.0
Pretax Coverage of:							
Total Interest Expense[a]	3.4	3.0	2.8	3.2	3.3	3.6	3.4
Long-Term Debt Interest Expense[a]	3.7	3.6	3.4	3.8	3.7	4.0	3.7
Allowance for Funds Used During Construction as % of Net Income	20.7	29.4	32.6	31.0	34.5	26.8	28.3
Expenses							
Operating Expenses as % of Operating Revenue	93.8	94.5	95.0	94.9	94.9	94.1	93.9
Maintenance Expenses as % of Total Plant	2.3	2.3	2.5	2.5	2.4	2.4	2.4
Depreciation Expenses as % of Total Plant	3.1	3.1	3.1	3.2	3.3	3.5	3.6
Depreciation Expenses as % of Depreciable Plant	3.1	3.6	3.2	3.3	3.6	3.7	3.7
Total Taxes as % of Total Plant	7.0	6.9	7.4	8.9	9.1	10.1	9.7
Total Taxes as % of Net Plant	10.0	10.1	10.8	13.2	13.8	15.5	12.8
Total Taxes as % of Net Income plus Total Taxes	61.2	59.3	61.6	62.5	63.2	62.2	67.9
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[b]	26.9	15.5	21.6	22.8	20.1	40.1	38.5
Plant							
Total Plant as % of Total Operating Revenue	104.9	92.2	85.3	77.8	77.1	77.2	82.3
Net Plant as % of Total Operating Revenue	73.1	63.7	58.5	52.6	51.1	50.3	62.2
Depreciation Reserve as % of Total Plant	30.4	31.0	31.4	32.4	33.7	34.9	24.4
Depreciation Reserve as % of Depreciable Plant	31.0	36.3	32.6	33.7	36.3	36.5	25.4
Total Plant per Employee ($000)	215.6	230.3	253.3	267.4	280.2	298.3	299.2
All Operations							
Earnings							
Utility Operating Income as % of Total Plant	6.3	6.5	7.1	7.6	7.9	8.0	7.6
Utility Operating Income as % of Net Plant	8.1	8.4	9.2	9.8	10.2	10.5	10.0
Operating Revenue as % of Total Plant	36.7	39.8	42.5	42.6	40.8	42.1	52.3
Common Dividend Payout Ratio	72.6	76.0	73.3	69.4	68.6	63.7	74.1
Return on Common Equity	10.7	10.8	11.7	12.9	13.5	13.8	11.8
Return on Average Common Equity	11.4	11.4	12.3	13.8	14.4	13.9	12.3
Return on Net Plant	4.0	4.0	4.4	5.0	5.3	5.7	4.9
Pretax Coverage of:							
Total Interest Expense[a]	2.8	2.6	2.6	2.9	3.1	3.2	3.0
Long-Term Debt Interest Expense[a]	3.0	3.0	3.1	3.4	3.4	3.5	3.3
Allowance for Funds Used During Construction as % of Net Income	33.1	37.4	37.2	37.0	41.5	34.8	37.2
Expenses							
Operating Expenses as % of Operating Revenue	86.3	87.2	86.9	86.2	85.6	85.2	84.9
Maintenance Expenses as % of Total Plant	2.1	2.1	2.1	2.2	2.1	2.2	2.2
Depreciation Expenses as % of Total Plant	2.4	2.4	2.4	2.5	2.4	2.6	2.6
Depreciation Expenses as % of Depreciable Plant	3.3	3.2	3.1	3.3	3.4	3.5	3.5
Total Taxes as % of Total Plant	4.3	4.3	4.7	5.4	5.6	6.2	5.9
Total Taxes as % of Net Plant	5.6	5.6	6.1	7.0	7.3	8.1	7.8
Total Taxes as % of Net Income plus Total Taxes	53.4	53.2	53.5	54.3	54.0	55.2	57.7
Current Federal Income Tax as % of Net Income plus current Federal Income Tax[b]	15.6	16.8	20.7	28.7	23.2	27.4	28.5
Plant							
Total Plant as % of Total Operating Revenue	272.3	251.4	235.4	234.8	245.4	237.4	252.4
Net Plant as % of Total Operating Revenue	211.2	194.7	181.4	180.8	189.6	180.6	191.2
Depreciation Reserve as % of Total Plant	22.4	22.5	22.9	23.0	22.7	23.9	24.2
Depreciation Reserve as % of Depreciable Plant	26.8	30.1	29.7	30.4	32.1	32.3	32.0
Capitalization							
Long-term Debt as % of Net Plant	46.3	45.5	44.6	44.7	44.3	45.8	44.8
% Total Capitalization Represented by:							
a. Long-term Debt	48.4	48.0	47.5	47.1	46.7	46.8	46.7
b. Preferred Stock	13.3	13.2	12.9	12.3	12.1	11.2	10.2
c. Common Equity	38.3	38.8	39.6	40.6	41.3	42.0	43.1
% Current Year Financing of Construction Expenditures Represented by:							
a. Internal Sources	24.7	32.5	41.3	49.8	54.7	45.4	52.3
b. Equity Issues	3.0	35.9	23.7	30.3	18.6	20.2	28.6
c. Debt Issues	72.3	31.6	35.0	19.9	26.7	34.4	19.1

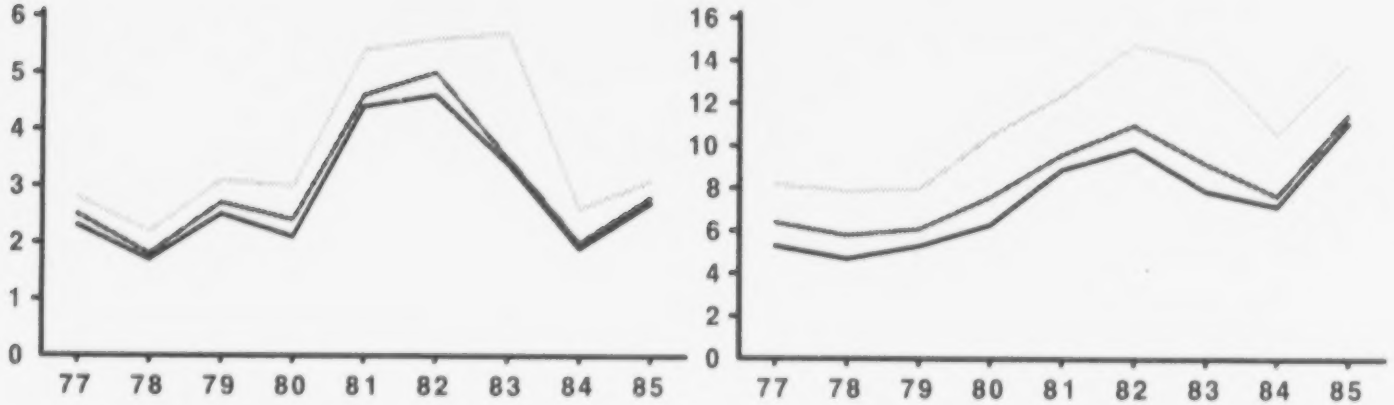
a. Reflects pre-federal income tax coverage.
b. Includes "Investment Tax Credit Adjustment."

SECTION 15
SECURITY ISSUES

	1985	% Change 85/84
No. of Issues		
Total	415	+ 7.5
Common Stock	222	− 3.1
Preferred Stock	12	− 7.7
Debt Issues	181	+25.7
Amount		
(Thousands)		
Total	$13,893,132	+31.1
Common Stock	2,428,977	−14.8
Preferred Stock	325,701	−39.5
Debt Issues	11,138,454	+54.6

CHART 15-1

GAS UTILITY NEW SECURITY ISSUES
(BILLIONS OF DOLLARS)



Distribution, Transmission and Integrated Companies

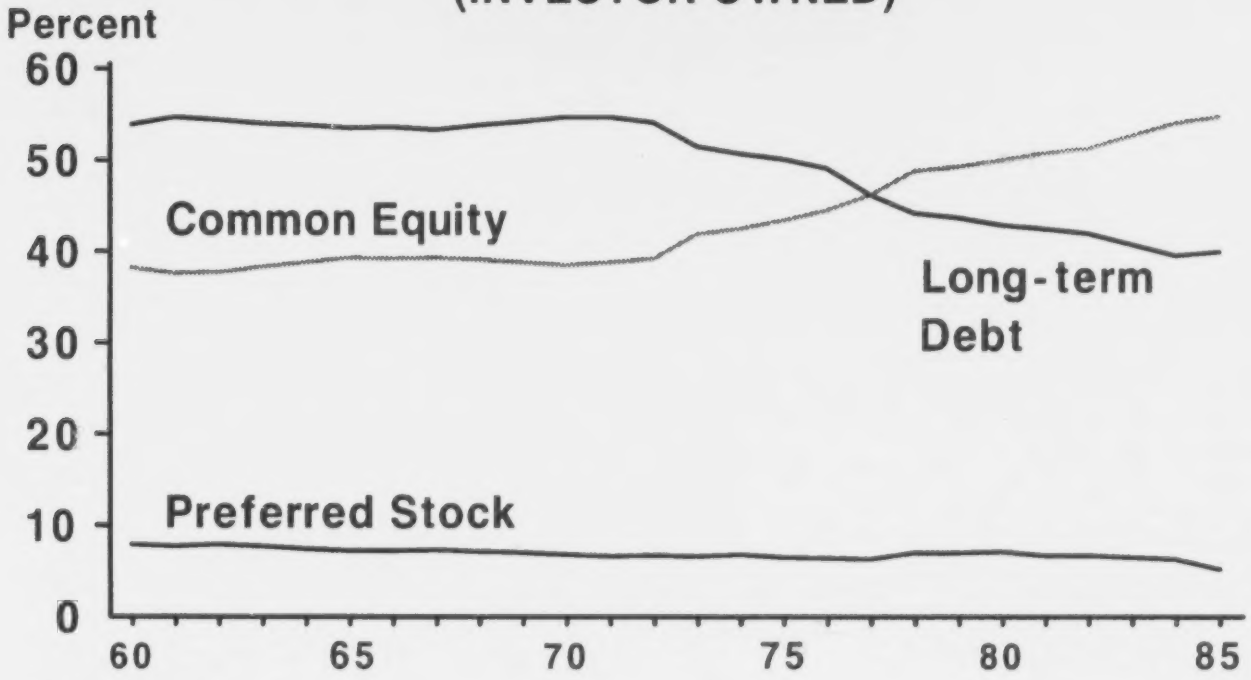
All Gas Utility Companies

■ **Debt Issues** ■ **Preferred Stock** ■ **Common Stock**

REFERENCE: TABLES 15-1, 15-4, 15-6, 15-8, 15-10, 15-12

CHART 14-1

GAS UTILITY INDUSTRY TOTAL CAPITALIZATION (INVESTOR OWNED)



REFERENCE: TABLE 14-1

TABLE 14-6
SELECTED ANALYTICAL RATIOS RELATING TO INVESTOR-OWNED GAS UTILITY INDUSTRY OPERATING AND MAINTENANCE EXPENSES, 1970-1985[a]

	Total Operating and Maintenance Expense per Therm of Sales (cents)					Total Operating Revenue per Therm of Sales (cents)				
Type of Activity	1970	1975	1980	1984	1985	1970	1975	1980	1984	1985
Natural Gas Distribution[b]	5.85	11.53	29.37	47.67	46.65	8.46	15.12	34.82	56.94	56.68
Natural Gas Transmission	2.44	6.07	22.12	35.41	35.62	3.45	8.35	25.23	40.38	40.57

	Transmission and Distribution Expense per Mile of Pipe (dollars)					Total Cost of Purchases as Percent of Total Operating and Maintenance Expense (%)				
Type of Activity	1970	1975	1980	1984	1985	1970	1975	1980	1984	1985
Natural Gas Distribution[b]	1,423.07	1,904.73	2,666.68	3,322.82	3,396.86	69.30	77.74	85.80	85.64	84.21
Natural Gas Transmission	2,398.21	3,836.43	11,510.06	15,676.48	13,899.46	89.00	86.09	90.66	88.83	87.12

	Customer Accounts Expense Per Customer (dollars)					Total Payroll as Percent of Total Operating and Maintenance Expense (%)				
Type of Activity	1970	1975	1980	1984	1985	1970	1975	1980	1984	1985
Natural Gas Distribution[b]	8.06	13.90	22.68	34.35	33.33	19.18	14.97	9.05	8.08	8.92
Natural Gas Transmission						7.41	5.99	2.97	3.27	4.10

	Gross Sales Expense per Customer (dollars)				
Type of Activity	1970	1975	1980	1984	1985
Straight Natural Gas Distribution	6.56	2.90	2.94	4.05	4.95
Combination Natural Gas Distribution	4.01	1.16	0.60	0.76	1.07

a. Integrated companies excluded.
b. Includes both straight gas and combination companies.

TABLE 15-1
GAS UTILITY INDUSTRY SECURITY ISSUES
OF DISTRIBUTION, INTEGRATED, TRANSMISSION, HOLDING,[a] AND COMBINATION GAS AND ELECTRIC COMPANIES
1960-1985[b]

	Total		Common Stock		Preferred Stock		Debt Issues							
							Total		Bonds		Debentures		Notes	
Year	No. of Issues	Amount (000)	No. of Issues	Amount (000)	No. of Issues	Amount (000)	No. of Issues	Amount (000)	No. of Issues	Amount (000)	No. of Issues	Amount (000)	No. of Issues	Amount (000)
1960	193	$ 1,859,043	67	$ 240,509	19	$ 202,267	107	$1,416,267	79	$1,098,250	20	$ 276,323	8	$ 41,694
1965	176	1,728,807	60	99,444	28	324,790	88	1,304,573	61	854,010	18	410,900	9	39,663
1966	164	1,966,903	56	109,905	22	200,906	86	1,656,092	70	1,375,390	8	222,412	8	58,290
1967	187	2,930,328	50	59,205	23	265,847	114	2,605,276	82	1,997,644	21	565,274	11	42,358
1968	167	2,760,665	52	143,110	16	258,254	99	2,359,301	70	1,540,501	18	588,750	11	230,050
1969	204	3,443,576	78	457,935	18	267,762	108	2,717,879	64	1,664,945	26	758,569	18	294,365
1970	280	6,030,084	68	745,638	33	620,674	179	4,663,772	125	3,502,000	27	897,500	27	264,272
1971	330	7,012,900	96	1,283,271	47	961,439	187	4,764,190	103	3,193,366	26	927,500	58	643,324
1972	280	6,832,495	83	1,306,307	39	1,181,808	158	4,340,380	87	3,032,306	13	554,500	58	753,574
1973	286	6,302,378	95	1,408,410	39	1,073,959	151	3,820,009	82	2,466,690	6	260,000	63	1,093,319
1974	286	7,889,359	102	1,144,544	35	1,128,175	145	5,616,640	78	3,950,281	17	739,519	50	926,840
1975	353	8,312,575	141	1,973,385	42	1,059,396	170	5,279,794	101	3,661,125	19	911,571	50	707,098
1976	336	9,104,026	152	2,472,747	41	1,108,268	143	5,523,011	75	2,899,279	16	860,500	52	1,763,232
1977	336	8,244,438	167	1,864,404	40	1,106,130	129	5,273,404	70	2,956,200	10	461,500	49	1,855,704
1978	351	7,933,090	163	2,167,077	48	1,055,458	140	4,710,555	73	3,189,650	12	306,516	55	1,214,389
1979	322	7,959,649	162	1,860,954	30	773,692	130	5,325,003	69	2,908,350	11	895,000	50	1,521,653
1980	275	10,508,334	101	2,879,775	31	1,288,237	143	6,340,322	73	3,571,945	18	1,510,000	52	1,258,377
1981	472	12,384,931	246	2,816,829	27	654,940	199	8,913,162	110	5,051,554	16	1,207,500	73	2,654,108
1982	523	14,794,327	287	3,832,926	32	1,073,300	204	9,888,101	107	4,538,410	20	1,356,000	77	3,993,691
1983	499	14,014,964	275	4,855,205	29	1,301,151	145	7,858,608	86	4,651,154	12	1,024,703	47	2,182,751
1984	386	10,596,488	229	2,852,559	13	538,000	144	7,205,929	90	4,452,571	12	838,250	42	1,915,108
1985	415	13,893,132	222	2,428,977	12	325,701	181	11,138,454	85	6,131,774	9	770,015	87	4,236,665

a. Holding companies used in this section are as follows: Columbia Gas Systems, Inc., Dominion Resources, Inc., Northeast Utilities, Northern States Power Company, Public Service Company of Colorado, Tenneco, Inc., Union Electric Company, Utilicorp United, Inc., and Wisconsin Electric Power Company.

b. All new and refunding security issues, except sales by subsidiaries to parent companies and direct exchanges for which data were obtainable have been included. Short term notes for less than one year are omitted. Bonds, debentures, and notes are included in principal amounts; preferred stocks at stated or liquidating values; and common stocks at offerings prices.

TABLE 15-2
GAS UTILITY INDUSTRY AVERAGE PERCENT COST AND YIELD OF SECURITY ISSUES OF DISTRIBUTION, INTEGRATED, TRANSMISSION, HOLDING,[a] AND COMBINATION GAS AND ELECTRIC COMPANIES 1960-1985[b]

	Preferred Stock				Bonds				Debentures				Sample Amount (000)		
	Cost %		Yield %		Cost %		Yield %		Cost %		Yield %				
Year	Average	Weighted Average	Average	Weighted Average	Average	Weighted Average	Average	Weighted Average	Average	Weighted Average	Average	Weighted Average	Preferred Stock	Bonds	Debentures
1960	5.61	5.51	5.50	5.45	5.22	5.03	5.17	4.98	5.22	5.09	5.14	5.03	$ 192,767	$1,017,700	$ 266,602
1965	4.71	4.78	4.69	4.76	4.77	4.74	4.75	4.71	4.84	4.87	4.81	4.82	268,200	806,460	403,700
1966	5.60	5.61	5.59	5.57	5.80	5.80	5.74	5.73	5.94	5.91	5.86	5.83	89,130	1,251,935	150,000
1967	6.15	6.18	6.10	6.11	6.17	6.18	6.11	6.10	6.43	6.43	6.32	6.35	224,370	1,882,995	507,500
1968	6.69	6.63	6.62	6.55	6.80	6.82	6.73	6.80	7.13	7.19	7.04	7.10	133,000	1,448,801	442,000
1969	8.08	8.04	7.95	7.93	7.66	7.61	8.52	8.22	8.39	8.47	8.52	8.22	226,888	1,664,945	758,569
1970	9.25	9.27	9.16	9 18	9.04	9.08	9.06	9.26	9.16	9.36	9.06	9.26	570,674	3,492,500	897,000
1971	8.16	7.98	8.05	7.87	8.06	7.90	7.97	7.81	8.16	8.14	8.07	8.05	922,312	3,098,589	912,500
1972	7.70	7.65	7.62	7.56	7.60	7.56	7.53	7.50	7.53	7.44	7.46	7.38	1,074,539	2,631,306	455,500
1973	7.72	7.61	7.66	7.54	7.98	7.93	7.91	7.87	7.80	7.77	7.73	7.71	1,051,459	2,137,890	200,000
1974	9.96	9.83	9.82	9.68	9.76	9.84	9.67	9.75	9.48	9.34	9.40	9.25	996,175	3,222,000	535,000
1975	10.87	10.89	10.55	10.53	10.10	10.06	10.00	9.97	10.28	10.31	10.17	10.20	1,028,515	3,346,050	801,000
1976	10.15	9.49	9.16	9.24	8.96	9.01	8.87	8.93	8.88	8.87	8.81	8.80	1,050,268	2,826,590	735,000
1977	8.50	8.45	8.34	8.31	8.51	8.50	8.45	8.44	8.74	8.36	8.63	8.29	973,512	2,682,500	265,000
1978	8.84	8.90	8.75	8.68	8.40	8.18	8.38	8.01	9.26	9.02	9.12	8.89	806,206	2,669,900	150,000
1979	9.05	9.32	9.03	9.23	11.14	10.55	11.12	10.48	10.81	11.12	10.65	11.04	705,500	2,348,300	645,000
1980	11.91	12.40	11.67	12.20	11.99	12.92	11.90	12.82	13.07	12.67	12.97	12.57	935,500	3,038,400	925,000
1981	13.75	14.06	13.57	13.80	15.06	16.55	14.77	16.29	16.24	16.11	15.80	15.76	630,500	3,956,154	1,207,500
1982	14.39	14.61	14.20	14.32	14.39	14.94	14.27	14.82	15.46	15.19	15.17	14.95	858,800	3,914,100	1,356,000
1983	11.69	12.18	11.42	11.85	11.82	12.10	11.63	11.96	12.40	13.54	12.23	13.39	1,209,175	3,958,380	780,000
1984	13.34	13.22	13.11	12.97	12.61	12.99	12.43	12.84	11.82	11.83	11.72	11.72	538,000	3,662,570	786,250
1985	11.68	11.67	11.65	11.67	10.80	11.13	10.47	10.93	11.24	11.58	11.11	11.46	101,000	4,477,947	722,189

a. Refer to Table 15-1 for name of holding companies.

b. Includes only those preferred stocks, bonds, and debentures shown in Table 15-1 for which necessary cost and yield data were available.

Definitions: "Cost" refers to the expenses incurred by a company relative to new security issues over the life of debt issues and fixed dividends (if applicable) on preferred stocks. It includes underwriter fees, plus discount expenses less premiums.

"Yield" is the rate of return on investment by a buyer of these debt issues and fixed dividends (if applicable) expected on preferred stock. It includes underwriter fees, plus premium expenses less discounts.

TABLE 15-3
GAS UTILITY INDUSTRY LONG TERM DEBT ISSUES,
BY MOODY'S BOND RATING CATEGORY, 1985

	Issues		Cost %		Yield %	
Rating	Number	Sample Amount (000)	Average	Weighted Average	Average	Weighted Average
Aaa	1	$ 100,000	11.65	11.65	11.54	11.54
Aa	3	$ 260,000	10.90	10.60	10.82	10.54
A	13	$1,875,000	11.43	11.53	11.29	11.27
Baa	8	$ 811,000	11.87	11.90	11.79	11.82
Ba	2	$ 330,750	12.89	13.14	12.65	12.88
B	*	*	*	*	*	*

*No issues used in this sample.

TABLE 15–4
GAS UTILITY INDUSTRY COMMON STOCK ISSUES, BY TYPE OF COMPANY
1979–1985[a]

Type of Company	1979	1980	1981	1982	1983	1984	1985
Total							
Amount (000)	$1,860,954	$2,879,775	$2,816,829	$3,832,926	$4,855,205	$2,852,559	$2,428,977
No. of Issues	162	101	246	287	275	229	222
Distribution							
Amount (000)	$53,295	$277	$178,822	$69,503	$272,950	$224,065	$304,841
No. of Issues	9	4	33	30	43	34	62
Transmission							
Amount (000)	$323,125	$453,019	$565,822	$375,298	$159,889	$35,625	$300
No. of Issues	15	7	11	10	7	1	1
Integrated							
Amount (000)	$43,012	$156,900	$84,240	$121,926	$1,835,208	$334,095	$35,023
No. of Issues	15	5	20	44	34	39	16
Combination Utilities							
Amount (000)	$1,385,842	$2,053,120	$1,839,529	$2,984,412	$2,394,543	$1,742,913	$1,767,779
No. of Issues	120	80	169	194	183	136	121
Holding[b]							
Amount (000)	$55,680	$216,459	$148,416	$281,787	$192,615	$515,861	$321,034
No. of Issues	3	5	13	9	8	19	22

a. See Footnote "b", Table 15–1 for description of securities included and the derivation of stated amounts.
b. A holding company is a corporation that is formed for the sole purpose of owning stock in other companies. Names of companies included in Footnote "a" of Table 15–1.

TABLE 15-5
GAS UTILITY INDUSTRY INDEXES OF COMMON STOCK PRICES, DIVIDENDS, YIELDS, AND EARNINGS BY TYPE OF COMPANY, 1980–1985

Type of Company	Year	1980		1981		1982		1983		1984		1985	
	Week	Jun 27	Dec 31	Jun 26	Dec 31	Jun 25	Dec 31	Jul 1	Dec 30	Jun 29	Dec 30	Jun 28	Dec 31
Natural Gas Industry													
a) Market Price ($ Per Share)		108.29	139.35	108.36	106.96	84.47	92.94	113.52	113.40	109.88	116.05	135.91	138.65
b) Dividend ($ Per Share)		6.18	6.45	6.70	6.91	6.89	7.14	7.05	7.29	7.44	7.71	7.89	8.12
c) Yield (Percent)		5.71	4.63	6.18	6.46	8.16	7.68	6.21	6.43	6.77	6.64	5.81	5.86
d) Earnings ($ Per Share)*		13.06	14.21	14.55	16.97	16.34	14.98	13.11	12.92	14.88	12.46	9.48	8.48
Distribution Companies													
a) Market Price ($ Per Share)		54.05	56.19	54.79	53.50	48.27	50.62	55.49	55.79	56.87	69.70	81.61	76.58
b) Dividend ($ Per Share)		4.61	4.68	4.96	5.12	5.29	5.39	5.42	5.55	5.67	5.88	6.03	6.22
c) Yield (Percent)		8.53	8.33	9.05	9.57	10.96	10.65	9.77	9.95	9.97	8.44	7.39	8.12
d) Earnings ($ Per Share)*		8.53	8.07	8.81	8.77	8.22	7.46	6.34	6.66	9.99	2.58	2.43	2.42
Transmission Companies													
a) Market Price ($ Per Share)		138.88	186.77	137.87	135.42	99.17	114.32	141.88	142.96	137.19	145.38	167.48	175.87
b) Dividend ($ Per Share)		7.20	7.59	7.85	8.29	8.56	8.90	8.59	8.89	9.04	9.39	9.66	9.91
c) Yield (Percent)		5.18	4.06	5.69	6.12	8.63	7.79	6.05	6.22	6.59	6.46	5.77	5.63
d) Earnings ($ Per Share)*		15.76	19.32	17.45	23.17	21.57	19.64	16.99	15.81	18.16	17.01	13.70	9.97

* Earnings are for twelve month periods.
Source: Moody's Investor Service, *Moody's Public Utility News Reports.*

TABLE 15-6
GAS UTILITY INDUSTRY PREFERRED STOCK ISSUES, BY TYPE OF COMPANY
1979-1985[a]

Type of Company	1979	1980	1981	1982	1983	1984	1985
Total							
Amount (000)	$773,692	$1,288,237	$654,940	$1,073,300	$1,301,151	$538,000	$325,701
No. of Issues	30	31	27	32	29	13	12
Distribution							
Amount (000)	$92,575	$34,000	$21,000	$8,000	$30,000	$10,000	$361
No. of Issues	5	3	2	1	1	1	3
Transmission							
Amount (000)	$70,117	$259,737	$125,206	$285,000	$0	$0	$20,000
No. of Issues	3	1	4	6	0	0	1
Integrated							
Amount (000)	$33,500	$3,500	$27,000	$102,000	$89,494	$100,000	$0
No. of Issues	2	1	1	4	5	1	0
Combination Utilities							
Amount (000)	$577,500	$991,000	$481,734	$675,300	$998,922	$428,000	$177,200
No. of Issues	20	26	20	20	19	11	6
Holding[b]							
Amount (000)	$0	$0	$0	$3,000	$182,735	$0	$128,140
No. of Issues	0	0	0	1	4	0	2

a. See Footnote "b", Table 15-1 for description of securities included and the derivation of stated amounts.
b. A holding company is a corporation that is formed for the sole purpose of owning stock in other companies. Names of companies included in Footnote "a" of Table 15-1.

TABLE 15-7
GAS UTILITY INDUSTRY AVERAGE PERCENT COST AND YIELD OF PREFERRED STOCK ISSUES
1979-1985[a]

	1979		1980		1981		1982		1983		1984		1985	
	Cost %	Yield %	Cost %	Yield %	Cost %	Yield %	Cost %	Yield %	Cost %	Yield %	Cost %	Yield %	Cost %	Yield %
Total														
Average	9.05	9.03	11.91	11.67	13.75	13.57	14.39	14.20	11.69	11.42	13.34	13.11	11.68	11.65
Weighted Average	9.32	9.23	12.40	12.20	14.06	13.80	14.61	14.32	12.18	11.85	13.22	12.97	11.67	11.67
Sample Amount (000)		$705,500		$935,500		$630,500		$858,800		$1,209,175		$538,000		$101,000
Distribution														
Average	9.34	9.30	9.26	9.08	15.98	15.65	13.00	13.00	11.76	11.50	12.88	12.88	c	c
Weighted Average	9.34	9.30	9.34	9.13	16.41	15.79	13.00	13.00	11.76	11.50	12.88	12.88	c	c
Sample Amount (000)		$70,000		$34,000		$21,000		$8,000		$30,000		$10,000		$0
Transmission														
Average	8.38	8.38	c	c	13.28	13.00	14.55	14.27	c	c	c	c	8.80	8.80
Weighted Average	8.43	8.43	c	c	13.92	13.60	14.63	14.28	c	c	c	c	8.80	8.80
Sample Amount (000)		$70,000		$0		$125,000		$175,000		$0		$0		$20,000
Integrated														
Average	9.50	9.50	9.50	9.50	12.25	12.25	14.00	14.00	11.16	10.92	10.88	10.62	c	c
Weighted Average	9.50	9.50	9.50	9.50	12.25	12.25	14.00	14.00	11.04	10.81	10.88	10.62	c	c
Sample Amount (000)		$8,500		$3,500		$27,000		$5,000		$85,000		$100,000		$0
Combination Utilities														
Average	8.99	8.93	12.38	12.12	13.67	13.45	14.45	14.26	11.79	11.51	13.60	13.35	12.63	12.60
Weighted Average	9.42	9.32	12.52	12.32	14.10	13.86	14.63	14.35	12.36	12.01	13.78	13.52	12.38	12.37
Sample Amount (000)		$557,000		$898,000		$457,500		$670,800		$995,425		$428,000		$81,000
Holding[b]														
Average	c	c	c	c	c	c	c	c	11.48	11.27	c	c	c	c
Weighted Average	c	c	c	c	c	c	c	c	11.46	11.26	c	c	c	c
Sample Amount (000)		$0		$0		$0		$0		$98,750		$0		$0

a. Includes only those issues in Table 15-6 for which necessary cost and yield data were available.
b. A holding company is a corporation that is formed for the sole purpose of owning stock in other companies. Names of companies included in Footnote "a" of Table 15-1.
c. No issues used in this sample.
Definitions: "Cost" refers to the expenses incurred by a company. It includes dividends, underwriter fees, plus discount expenses less premiums.
"Yield" is the rate of return on investment by a buyer.

TABLE 15-8
GAS UTILITY INDUSTRY BOND ISSUES, BY TYPE OF COMPANY
1979-1985[a]

Type of Company	1979	1980	1981	1982	1983	1984	1985
Total							
Amount (000)	$2,908,350	$3,571,945	$5,051,554	$4,538,410	$4,651,154	$4,452,571	$6,131,774
No. of Issues	69	73	110	107	86	90	85
Distribution							
Amount (000)	$371,150	$25,545	$560,500	$135,000	$493,321	$117,355	$676,729
No. of Issues	14	3	20	12	13	7	20
Transmission							
Amount (000)	$167,000	$53,000	$875,000	$425,000	$225,000	$0	$0
No. of Issues	3	1	5	4	2	0	0
Integrated							
Amount (000)	$111,100	$122,500	$221,400	$150,647	$449,103	$227,150	$18,000
No. of Issues	9	7	6	8	12	6	1
Combination Utilities							
Amount (000)	$2,259,100	$3,160,900	$3,297,909	$3,701,163	$3,147,730	$3,922,866	$4,682,495
No. of Issues	43	59	74	81	52	73	54
Holding[b]							
Amount (000)	$0	$210,000	$96,745	$126,600	$336,000	$185,200	$754,550
No. of Issues	0	3	5	2	7	4	10

a. See Footnote "b", Table 15-1 for description of securities included and the derivation of stated amounts.
b. A holding company is a corporation that is formed for the sole purpose of owning stock in other companies. Names of companies included in Footnote "a" of Table 15-1.

TABLE 15–10
GAS UTILITY INDUSTRY DEBENTURE ISSUES, BY TYPE OF COMPANY
1979–1985[a]

Type of Company	1979	1980	1981	1982	1983	1984	1985
Total							
Amount (000)	$895,000	$1,510,000	$1,207,500	$1,356,000	$1,024,703	$838,250	$770,015
No. of Issues	11	18	16	20	12	12	9
Distribution							
Amount (000)	$40,000	$0	$88,500	$0	$165,000	$0	$0
No. of Issues	1	0	4	0	3	0	0
Transmission							
Amount (000)	$450,000	$663,500	$689,000	$703,000	$324,703	$437,000	$355,750
No. of Issues	4	8	7	10	3	6	3
Integrated							
Amount (000)	$215,000	$416,500	$340,000	$308,000	$460,000	$120,000	$224,039
No. of Issues	3	5	3	4	5	3	2
Combination Utilities							
Amount (000)	$15,000	$230,000	$90,000	$245,000	$75,000	$181,250	$190,226
No. of Issues	1	3	2	5	1	2	4
Holding[b]							
Amount (000)	$175,000	$200,000	$0	$100,000	$0	$100,000	$0
No. of Issues	2	2	0	1	0	1	0

a. See Footnote "b", Table 15–1 for description of securities included and the derivation of stated amounts.
b. A holding company is a corporation that is formed for the sole purpose of owning stock in other companies. Names of companies included in Footnote "a" of Table 15–1.

TABLE 15-11
GAS UTILITY INDUSTRY AVERAGE PERCENT COST AND YIELD OF DEBENTURE ISSUES
1979-1985[a]

	1979		1980		1981		1982		1983		1984		1985	
	Cost %	Yield %	Cost %	Yield %	Cost %	Yield %	Cost %	Yield %	Cost %	Yield %	Cost %	Yield %	Cost %	Yield %
Total														
Average	10.81	10.65	13.07	12.97	16.24	15.80	15.46	15.17	12.40	12.23	11.82	11.72	11.24	11.11
Weighted Average	11.12	11.04	12.67	12.57	16.11	15.76	15.19	14.95	13.54	13.39	11.83	11.72	11.58	11.46
Sample Amount (000)		$645,000		$925,000		$1,207,500		$1,356,000		$880,000		$786,250		$722,189
Distribution														
Average	9.93	9.88	c	c	16.22	15.81	c	c	12.68	12.37	c	c	c	c
Weighted Average	9.93	9.88	c	c	17.20	16.85	c	c	12.41	12.23	c	c	c	c
Sample Amount (000)		$40,000		$0		$88,500		$0		$165,000		$0		$0
Transmission														
Average	11.31	11.22	13.89	13.81	16.65	16.24	15.85	15.66	13.30	13.19	13.16	13.06	12.56	12.42
Weighted Average	11.40	11.30	14.10	14.02	16.49	16.09	15.46	15.26	13.30	13.19	12.84	12.72	12.49	12.35
Sample Amount (000)		$200,000		$175,000		$689,000		$703,000		$200,000		$385,000		$355,750
Integrated														
Average	10.75	10.68	11.65	11.56	14.80	14.43	13.96	13.64	11.79	11.69	11.80	11.72	11.66	11.64
Weighted Average	10.98	10.94	11.17	11.09	14.86	14.69	13.85	13.63	11.21	11.12	12.30	12.26	11.75	11.73
Sample Amount (000)		$215,000		$400,000		$340,000		$308,000		$440,000		$120,000		$224,039
Combination Utilities														
Average	10.92	10.38	14.54	14.39	17.02	16.33	15.85	15.37	12.26	12.00	9.97	9.75	8.84	8.63
Weighted Average	10.92	10.38	14.64	14.48	16.78	16.22	15.95	15.53	12.26	12.00	10.26	10.03	9.02	8.81
Sample Amount (000)		$15,000		$150,000		$90,000		$245,000		$75,000		$131,250		$142,400
Holding[b]														
Average	11.16	11.08	12.93	12.84	c	c	15.57	15.57	c	c	10.26	10.25	c	c
Weighted Average	11.27	11.18	12.93	12.84	c	c	15.46	15.46	c	c	10.26	10.25	c	c
Sample Amount (000)		$175,000		$200,000		$0		$100,000		$0		$100,000		$0

a. Includes only those issues in Table 15-10 for which necessary cost and yield data were available.
b. A holding company is a corporation that is formed for the sole purpose of owning stock in other companies. Names of companies included in Footnote "a" of Table 15-1.
c. No issues used in this sample.

Definitions: "Cost" refers to the expenses incurred by a company. It includes dividends, underwriter fees, plus discount expenses less premiums.
"Yield" is the rate of return on investment by a buyer.

TABLE 15–12
GAS UTILITY INDUSTRY NOTE ISSUES, BY TYPE OF COMPANY
1979–1985[a]

Type of Company	1979	1980	1981	1982	1983	1984	1985
Total							
Amount (000)	$1,521,653	$1,258,377	$2,654,108	$3,993,691	$2,182,751	$1,915,108	$4,236,665
No. of Issues	50	52	73	77	47	42	87
Distribution							
Amount (000)	$140,500	$153,900	$123,135	$550,515	$438,635	$185,600	$46,860
No. of Issues	6	4	11	9	7	4	6
Transmission							
Amount (000)	$666,066	$455,764	$1,209,039	$1,671,000	$613,058	$296,500	$753,500
No. of Issues	7	16	21	19	9	5	17
Integrated							
Amount (000)	$318,770	$228,571	$281,479	$647,675	$185,356	$369,626	$710,950
No. of Issues	14	9	7	15	7	7	9
Combination Utilities							
Amount (000)	$396,317	$383,142	$978,455	$1,124,501	$762,967	$640,182	$1,807,740
No. of Issues	23	22	33	34	20	20	39
Holding[b]							
Amount (000)	$0	$37,000	$62,000	$0	$182,735	$423,200	$917,615
No. of Issues	0	1	1	0	4	8	16

a. See Footnote "b", Table 15–1 for description of securities included and the derivation of stated amounts.
b. A holding company is a corporation that is formed for the sole purpose of owning stock in other companies. Names of companies included in Footnote "a" of Table 15–1.

SECTION 16
CONSTRUCTION EXPENDITURES

	1985	% Change 85/84
Construction Expenditures (Millions)		
Total	$5,671	+22.1
Production & Storage	790	+87.2
Transmission	1,562	+20.1
Underground Storage	175	+44.6
Distribution	2,577	+13.7
General	567	+ 6.0

TABLE 16-1
GAS UTILITY INDUSTRY CONSTRUCTION EXPENDITURES, BY TYPE OF FACILITY, 1960–1989[a]

(Millions)

Year	Total	Production and Storage	Transmission	Underground Storage	Distribution	General
1960	$1,845	$157	$848	$59	$696	$85
1961	1,662	172	654	55	687	94
1962	1,673	177	613	53	708	122
1963	1,558	138	461	106	752	101
1964	1,701	120	616	84	784	97
1965	1,935	156	770	69	824	116
1966	2,374	182	1,038	151	869	134
1967	2,252	186	1,006	91	848	121
1968	2,972	259	1,577	88	913	135
1969	2,686	83	1,511	128	863	101
1970	2,507	203	1,019	167	913	205
1971	2,419	340	842	171	888	178
1972	2,822	717	678	177	1,081	169
1973	2,966	771	746	201	1,094	155
1974	2,965	830	632	230	1,097	176
1975	2,466	555	590	276	910	136
1976	2,425	466	531	362	926	140
1977	2,833	620	670	323	1,048	172
1978	3,581	881	935	321	1,228	215
1979	4,366	1,125	1,226	281	1,448	286
1980	5,350	1,150	1,583	396	1,869	352
1981	6,389	1,346	2,352	326	1,955	410
1982	5,939	1,322	1,921	368	1,881	447
1983	4,078	607	1,065	139	1,845	422
1984	4,645	422	1,301	121	2,266	535
1985	5,671	790	1,562	175	2,577	567
1986(forecast)	5,584	496	1,605	171	2,753	559
1987(forecast)	6,184	667	1,902	227	2,812	576
1988(forecast)	6,094	637	1,784	198	2,895	580
1989(forecast)	6,099	658	1,766	224	2,910	541

a. For companies not reporting 1988 and 1989 forecasts, data extrapolated from earlier years.

TABLE 16-2
GAS UTILITY INDUSTRY CONSTRUCTION EXPENDITURES, BY TYPE OF FACILITY, 1979–1985

	1979	1980	1981	1982	1983	1984	1985
Production and Storage	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SNG Plant	0.6	3.1	2.3	2.7	0.5	0.8	0.3
LNG Plant	a	0.1	0.1	a	0.8	0.4	0.5
Propane Plant	2.2	2.3	3.0	3.8	7.3	11.3	0.6
Exploration and Drilling	29.1	18.2	18.7	22.1	22.6	25.7	28.5
Other[b]	64.1	72.3	71.1	66.1	65.8	54.5	64.9
LNG Storage	2.6	1.3	0.2	2.0	1.7	5.0	3.9
Other Storage	1.4	2.6	4.6	3.2	1.3	2.2	1.4
LNG Ships	0.0	0.0	0.0	0.0	0.0	a	0.0
Transmission	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
New and Replacement Pipe	68.7	70.4	79.6	77.3	72.5	73.2	72.4
Compressor Stations	26.0	20.1	13.8	18.8	21.4	20.6	21.3
Other	5.2	9.6	6.6	3.9	6.1	6.2	6.4
Distribution	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
New and Replacement Pipe	88.7	86.2	85.8	85.8	87.9	87.5	87.5
Compressor Stations	1.4	4.1	4.5	3.9	2.6	3.9	4.5
Other	9.9	9.7	9.7	10.3	9.5	8.6	8.0

a. Less than 0.1 percent.
b. Includes gathering.

SECTION 17
PERSONNEL DATA

	1985	% Change 85/84
Gas Utility Employees		
(Thousands)		
Total	216.6	− 2.1
Distribution	61.8	+33.7
Transmission	46.3	− 2.0
Integrated	43.3	−34.2
Combination	53.1	+ 6.8
Municipals	12.1	− 1.6

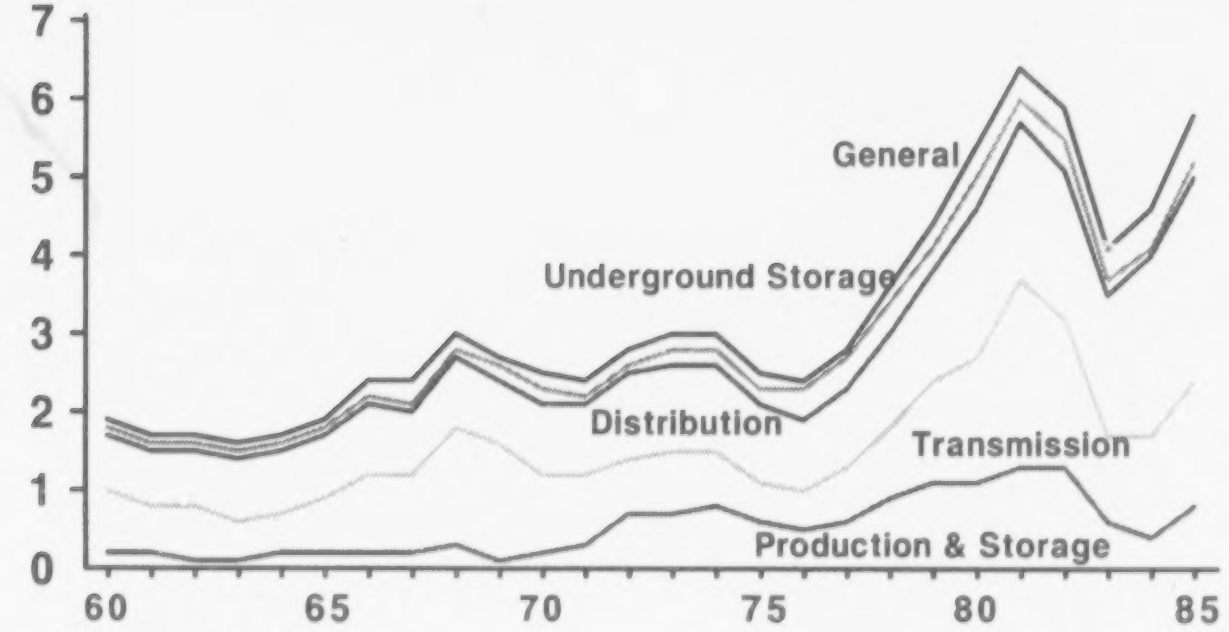
TABLE 15-9
GAS UTILITY INDUSTRY AVERAGE PERCENT COST AND YIELD OF BOND ISSUES 1979-1985[a]

	1979		1980		1981		1982		1983		1984		1985	
	Cost %	Yield %	Cost %	Yield %	Cost %	Yield %	Cost %	Yield %	Cost %	Yield %	Cost %	Yield %	Cost %	Yield %
Total														
Average	11.14	11.12	11.99	11.90	15.06	14.77	14.39	14.27	11.82	11.63	12.61	12.43	10.80	10.47
Weighted Average	10.55	10.48	12.92	12.82	16.55	16.29	14.94	14.82	12.10	11.96	12.99	12.84	11.13	10.93
Sample Amount (000)		$2,348,300		$3,038,400		$3,956,154		$3,914,100		$3,958,380		$3,662,570		$4,477,947
Distribution														
Average	11.32	11.26	12.09	12.00	16.09	15.99	15.30	15.30	12.16	12.07	13.41	13.38	10.11	9.11
Weighted Average	11.10	11.42	12.09	12.00	16.68	16.58	15.81	15.81	12.67	12.56	12.81	12.72	9.11	8.80
Sample Amount (000)		$224,150		$15,000		$497,500		$57,000		$350,450		$59,750		$400,200
Transmission														
Average	10.63	10.53	c	c	16.65	16.45	13.79	13.58	13.04	12.91	c	c	c	c
Weighted Average	10.63	10.53	c	c	16.47	16.27	14.18	13.98	13.04	12.91	c	c	c	c
Sample Amount (000)		$50,000		$0		$175,000		$225,000		$125,000		$0		$0
Integrated														
Average	12.85	12.75	12.92	12.87	15.88	15.76	15.12	14.98	12.27	12.13	14.47	14.29	c	c
Weighted Average	12.85	12.75	12.30	12.23	16.05	15.91	15.39	15.23	12.08	11.97	14.34	14.22	c	c
Sample Amount (000)		$70,000		$47,000		$218,000		$143,000		$394,000		$110,000		$0
Combination Utilities														
Average	9.74	9.92	11.85	11.75	14.73	14.57	14.28	14.15	11.73	11.55	12.46	12.27	10.92	10.53
Weighted Average	10.40	10.29	12.93	12.83	16.55	16.37	14.95	14.83	12.09	11.96	12.92	12.78	11.30	11.10
Sample Amount (000)		$2,004,150		$2,766,400		$2,968,909		$3,362,500		$2,777,930		$3,367,820		$3,802,747
Holding[b]														
Average	c	c	13.23	13.14	13.40	13.18	14.66	14.38	10.93	10.50	13.88	13.82	11.82	11.75
Weighted Average	c	c	12.95	13.86	15.57	15.30	15.09	14.98	11.20	10.87	13.61	13.55	11.74	11.66
Sample Amount (000)		$0		$210,000		$96,745		$126,600		$311,000		$125,000		$275,000

a. Includes only those issues in Table 15-8 for which necessary cost and yield data were available.
b. A holding company is a corporation that is formed for the sole purpose of owning stock in other companies. Names of companies included in Footnote "a" of Table 15-1.
c. No issues used in this sample.
Definitions: "Cost" refers to the expenses incurred by a company. It includes dividends, underwriter fees, plus discount expenses less premiums.
"Yield" is the rate of return on investment by a buyer.

CHART 16-1

GAS UTILITY INDUSTRY CONSTRUCTION EXPENDITURES (BILLIONS OF DOLLARS)



REFERENCE: TABLE 16-1

TABLE 17-1
GAS UTILITY INDUSTRY EMPLOYEES AND PAYROLL
1960–1985

Year	Average Number of Employees (Thousands)	Total Payroll (Thousands)	Average Wage per Employee
1960	206.4	$1,214,565	$ 5,880
1961	206.1	1,268,437	6,150
1962	204.4	1,316,057	6,440
1963	204.5	1,377,729	6,740
1964	204.8	1,420,754	6,940
1965	205.7	1,480,397	7,200
1966	207.4	1,556,577	7,500
1967	207.2	1,640,397	7,920
1968	208.6	1,759,784	8,440
1969	210.2	1,890,490	8,990
1970	211.7	2,021,197	9,550
1971	213.7	2,142,892	10,028
1972	215.4	2,321,932	10,780
1973	215.2	2,449,075	11,381
1974	213.4	2,606,903	12,216
1975	207.6	2,817,150	13,570
1976	205.1	3,044,605	14,844
1977	208.8	3,371,856	16,149
1978	209.8	3,647,057	17,383
1979	214.6	4,134,270	19,265
1980	215.4	4,612,791	21,415
1981	220.9	5,313,445	24,057
1982	227.8	5,998,666	26,342
1983	226.3	6,365,305	28,128
1984 R	221.2	6,602,168	29,849
1985	216.6	6,959,057	32,132

R–Revised.

TABLE 17-2
GAS UTILITY INDUSTRY EMPLOYEES AND PAYROLL BY TYPE OF PAYROLL AND TYPE OF COMPANY, 1960–1985

(Thousands)

	1960	1965	1970	1975	1980	1983	1984[R]	1985
Total								
Employees	206.4	205.7	211.7	207.6	215.4	226.3	221.2	216.6
Payroll—Total	$1,214,565	$1,480,397	$2,021,197	$2,817,150	$4,612,791	$6,365,305	$6,602,168	$6,959,057
Operating	914,438	1,146,226	1,606,321	2,292,448	3,652,941	5,055,875	5,292,915	5,515,089
Construction	209,082	262,792	325,546	380,835	627,706	856,297	890,048	962,353
Miscellaneous	62,045	71,379	89,330	143,867	332,144	453,133	419,205	481,615
Investor Owned—Total								
Employees	a	a	a	196.3	202.7	214.0	208.9	204.5
Payroll—Total	a	a	a	$2,675,092	$4,379,653	$6,073,173	$6,285,649	$6,629,132
Operating	a	a	a	2,184,446	3,463,437	4,813,325	5,016,924	5,227,943
Construction	a	a	a	357,221	594,326	817,700	862,091	993,035
Miscellaneous	a	a	a	133,425	321,890	442,148	406,634	468,154
Distribution								
Employees	a	a	a	51.3	52.1	45.8	46.2	61.8
Payroll—Total	a	a	a	$697,552	$1,040,436	$1,135,716	$1,241,732	$1,736,309
Operating	a	a	a	567,947	831,076	936,005	1,024,387	1,407,131
Construction	a	a	a	98,257	152,964	154,136	166,118	233,723
Miscellaneous	a	a	a	31,348	56,396	45,575	51,227	95,455
Transmission								
Employees	31.4	29.6	32.4	37.2	45.2	46.8	47.2	46.3
Payroll—Total	$199,701	$228,493	$331,955	$574,275	$1,178,706	$1,613,172	$1,663,635	$1,786,918
Operating	166,064	187,521	266,685	470,418	873,199	1,216,066	1,272,709	1,341,552
Construction	21,955	30,650	44,869	53,832	108,974	137,290	149,100	156,730
Miscellaneous	11,682	10,322	20,401	50,025	196,533	259,816	241,826	288,636
Integrated								
Employees	a	a	a	55.4	53.2	70.1	65.7	43.3
Payroll—Total	a	a	a	$676,967	$1,061,520	$1,776,262	$1,800,005	$1,355,107
Operating	a	a	a	548,291	873,837	1,460,586	1,497,310	1,158,017
Construction	a	a	a	91,439	138,062	201,600	211,774	146,519
Miscellaneous	a	a	a	37,237	49,621	114,076	90,921	50,571
Combination								
Employees	a	a	a	52.4	52.2	51.3	49.7	53.1
Payroll—Total	a	a	a	$726,298	$1,098,991	$1,548,023	$1,580,277	$1,750,798
Operating	a	a	a	597,790	885,325	1,200,668	1,222,518	1,321,243
Construction	a	a	a	113,693	194,326	324,674	335,099	396,063
Miscellaneous	a	a	a	14,815	19,340	22,681	22,660	33,492

a. Not available.
R–Revised.
Note: Data by company type not directly comparable from year to year due to acquisitions and mergers. See page ix.

TABLE 17-3
EMPLOYEE ACCIDENT INCIDENT AND SEVERITY RATES OF SELECTED INDUSTRIES, 1984[a]

	Rate	
	Incident	Severity
Gas Utilities[b]	**2.88**	**14.58**
All Industries	**2.15**	**19.53**
Agricultural Chemicals	.92	23.91
Aircraft	.82	12.20
Air Transportation	2.88	15.28
Bituminous Coal	.99	24.24
Cement	2.45	33.47
Chemical	.49	22.45
Communications	1.20	18.33
Construction	3.88	19.07
Electric, Electronic Equipment	.91	16.48
Electric Service	1.59	16.98
Fabricated Metal Products	2.03	18.72
Food	3.28	21.04
Furniture and Fixtures	1.80	16.67
General Government	5.43	14.73
Iron and Steel Foundries	2.43	18.93
Leather	2.42	19.01
Lumber and Wood Products	4.14	23.91
Machinery, excluding Electrical	1.70	18.82
Meat Products	5.27	18.03
Metal Mining	2.59	33.59
Motor Vehicles	1.08	20.37
Nonferrous Rolling, Drawing	2.06	21.84
Nonmetallic Minerals	1.47	25.85
Oil and Gas Extraction	.98	31.63
Paper	2.06	25.73
Petroleum and Coal Products	.97	27.84
Pipeline Transportation	.75	28.00
Primary Nonferrous Metals	2.18	24.31
Printing and Publishing	2.55	20.39
Railroad Equipment	3.97	31.74
Railroad Transportation	2.21	30.77
Rubber and Plastics	2.32	19.40
Services	3.21	13.40
Ship and Boat Building	5.01	11.58
Steel	1.54	31.82
Stone, Clay and Glass	2.95	25.76
Textile	.57	28.07
Transit	8.47	19.83
Trucking	7.28	21.84
Water Transportation	2.27	39.65
Wholesale and Retail Trade	1.71	15.79

a. Incident rate is the number of disabling injuries per 100 full-time employees. Severity rate is average lost workdays per injury.
b. Gas figures derived from National Safety Council data.
Source: National Safety Council, *Accident Facts*, 1985.

TABLE 17-4
DEATH RATES OF WORKERS, BY MAJOR INDUSTRIES, 1984

	Deaths	
	Total	Per 100,000 Workers
All Industries	**11,500**	**11**
Agriculture	1,600	46
Construction	2,200	39
Government	1,400	9
Manufacturing	1,100	6
Mining, Quarrying, Oil and Gas Wells	600	60
Service	1,900	7
Trade	1,200	5
Transportation and Public Utilities	1,500	27
Gas[a]	9	3.91

a. Included in Transportation and Public Utilities. Data derived from A.G.A. *Report of Occupational Injuries and Illnesses in the Gas Utility and Transmission Industry in the United States*, and does not represent total industry.
Source: National Safety Council, *Accident Facts*, 1985; gas figures derived from A.G.A. data.

APPENDIX A
GLOSSARY

(This is an abbreviated list of gas utility industry definitions. A complete list is contained in the *Glossary for the Gas Industry*).

Accident Frequency Rate: See Injury Frequency Rate, Disabling.

Accident Incident Rate: See Injury Incident Rate.

Accident Severity Rate: See Injury Severity Rate, Disabling.

Additions (To Utility Plant):

Gross Additions: Cost of construction, generally including overhead and allowance for funds used during construction (interest during construction), cost of land, land rights, and mineral interests, gas capitalized in underground storage, used facilities acquired, and the purchase cost of an acquired operating unit or systems of utility plant. See Construction Expenditures.

Net Additions: Gross additions less retirements and adjustments of utility plant. It is the net change in utility plant between two dates.

Anthracite: A hard coal containing little volatile matter, low ash and generally having a heating value of 11,000–12,000 Btu/lb.

Associated Natural Gas: See Gas, Natural.

Associated Number of Customers: See Customers, Average Number of.

Average Revenue Per Unit of Gas Sales (By Class of Service): Revenue from the sale of gas to a class of service, exclusive of forfeited discounts and penalties, divided by the corresponding number of units sold. Units may be therms, Btu's, or cubic feet.

Barrel (Oil): A volumetric unit of measurement equivalent to 42 U.S. standard gallons.

Bcf: 1,000,000,000 cubic feet; Billion cubic feet.

Bituminous Coal: Ranking of soft coal generally having a heating value of 11,000–13,000 Btu/lb., high in volatile matter and ash.

Blue Gas: See Water Gas.

Boiler Fuel Gas: Natural gas used as a fuel for the generation of steam (or hot water).

Bottled Gas: In the industry, liquefied petroleum gas contained under moderate pressure in cylinders, sometimes referred to as bottles. Usually propane and/or butane.

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British Thermal Unit (Btu): The quantity of heat that must be added to one pound of water to raise its temperature one degree Fahrenheit from 58.5 to 59.5 degrees Fahrenheit under standard pressure of 30 inches of mercury.

By-Products (Residuals): Secondary products which are obtained from the processing of a raw material and have commercial value. They may be the residues of the gas production process, such as coke, tar, and ammonia, or they may be the result of further processing of such residues, such as ammonium sulphate.

Capacity, Effective: The maximum load which a machine, apparatus, device, plant or system is capable of carrying under existing service conditions.

Carbon Black: Almost pure amorphous carbon consisting of extremely fine particles, usually produced from gaseous or liquid hydrocarbons by controlled combustion with a restricted air supply or by thermal decomposition.

Casinghead Gas: Unprocessed natural gas containing gasoline vapors produced from a reservoir containing oil.

City Gate (Town Border Station): See Gate Station.

Class of Service: Defines the type of customer. The common classes of service applied to ultimate consumers, and considerably more completely described in the A.G.A. publication "Definitions of a Gas Customer and Classes of Service for Industry Reporting Purposes" are:

1. **Residential Service**
   Covers service to customers for domestic purposes (single, multifamily or mobile homes, etc.). In residential service, the number of housing units within a structure determines the customer classification.
2. **Commercial Service**
   Covers service to customers engaged in wholesale or retail trade, agriculture, communications, finance, fisheries, forestry, government, insurance, real estate, transportation, etc., and to customers not directly involved in other classes of service.
3. **Industrial Service**
   Covers service to customers engaged primarily in a process which either involves the extraction of raw materials from the earth, or a change of raw or unfinished materials into another form or product.
4. **Other Services**
   Service to municipalities or divisions (agencies) of State or Federal Governments under special contracts or agreements or service classifications, which are applicable only to public authorities using gas for general or institutional purposes. (Exclude sales properly included under items 2 or 3 above, such as manufacturing arsenals or publicly-owned power systems).
5. **Sales for Resale** (Uniform System of Accounts, 483)
   Service to other utility companies, governmental agencies (municipal, county, state or federal), rural cooperatives, etc., for distribution and resale to ultimate customers. Service to other utilities for use by them and not for distribution and resale, is to be classified as residential, commercial, or industrial, depending upon the primary business or economic activity.

Coal Gas: Manufactured gas made by distillation or carbonization of coal in a closed coal gas retort, coke oven, or other vessel.

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Combination Gas Utility: Utility which supplies both gas and some other utility service (electricity, water, etc.). For purposes of A.G.A. statistics, a combination utility derives at least 5 percent but less than 95 percent of its total sales revenues from gas operations. See Appendix C for a partial list of combination companies.

Commercial Service: See Class of Service.

Communities (Served): A community is a contiguous built-up area, incorporated or unincorporated, commonly recognized as a separate entity. Any incorporated area and its adjacent built-up unincorporated area may be counted as one community.

Compressor Horsepower: See Horsepower, Compressor.

Compressor Station: Any permanent combination of facilities which supplies the energy to move gas at increased pressure from fields, in transmission lines or into storage. For reporting to A.G.A. include field (other than temporary) line, and storage compressor stations of producing and transmission companies; distribution companies should include underground storage compressor stations and stations used for transporting gas between local distribution systems but not booster or pumping stations used within a local distribution system.

Condensate: The liquid resulting when a vapor is subjected to cooling and pressure reduction. Also, liquid hydrocarbons condensed from gas and oil wells. Compare Liquids, Natural Gas.

Construction Expenditures: Cost of construction, including overheads and allowance for funds used during construction, for additions to, renewals, and replacements of plant facilities, but excluding the purchase cost of an acquired operating unit or system of utility plant, accounting transfers and adjustments to utility plant, and cost to remove plant facilities from service.

Conversion to Natural Gas: Changing the gas service to ultimate customers from a fuel other than natural gas to natural gas, including adjustment of consumers' appliances to perform satisfactorily with natural gas. Natural gas does not necessarily mean straight natural gas; stabilizing the heat content of the sendout gas by diluent gases or enriching gases is not considered to change the basic character of natural gas. For the purpose of uniform reporting a company should be considered a natural gas company when 95 percent of the system has been converted.

Cubic Foot: The most common unit of measurement of gas volume. It is the amount of gas required to fill a volume of one cubic foot under stated conditions of temperature, pressure, and water vapor.

Current Gas: See Storage, Underground.

Cushion Gas: The gas required in a depleted reservoir, used for storage of natural gas, so that reservoir pressure is such that the storage gas may be recovered.

Customer: An individual, firm or organization which purchases service at one location under one rate classification, contract, or rate schedule. If service is supplied at more than one location or under more than one rate schedule, each location and rate schedule shall be counted as a separate customer unless the consumption of the several locations is combined before billing and billed on one rate schedule.

Customers, Average Number of: The average number of customers is determined by summing the customers for each of the periods involved and dividing by the number of periods. See Customer.

Customers, End of Year: The number of customers at December (or the last month of a fiscal year) including all billing cycles. See Customers, Average Number of.

Degree Day, Heating: A measure of the coldness of the weather experienced, based on the extent to which the daily mean temperature falls below a reference temperature, usually 65°F. For example, on a day when the mean outdoor dry-bulb temperature is 35°F., there would be 30 degree days experienced. A daily mean temperature usually represents the sum of the high and low readings divided by two.

Demand: The rate at which gas is delivered to or by a system, part of a system, or a piece of equipment, expressed in cubic feet or therms or multiples thereof, for a designated period of time called the demand interval. Compare Load.

Design Day: A 24-hour period of demand which is used as a basis for planning gas capacity requirements.

Design Day Availability: The amount of each type of gas arranged to be available on the design day and the maximum combination of such supplies. (In the case of purchased natural gas, the maximum day allocation, maximum day contract quantity, or FERC authorization).

Design Day Temperature: The mean temperature assumed for the Design Day.

Dissolved Natural Gas: See Gas, Natural.

Distribution Company, Gas: Company which obtains the major portion of its gas operating revenues from the operation of a retail gas distribution system, and which operates no transmission system other than incidental connections within its own system or to the system of another company. For purposes of A.G.A. statistics, a distribution company obtains at least 90 percent of its gas operating revenues from sales to ultimate customers *and* classifies at least 90 percent of mains (other than service pipe) as distribution. Compare Integrated Company, Gas; Transmission Company, Gas. See Appendix C for a partial list of Distribution Companies.

Distribution Mains: See System Type.

Distribution System, Gas: See System Type.

Dry Natural Gas: See Gas, Natural.

Enriching: Increasing the heat content of a gas by mixing with it a gas of higher Btu content.

Exchange Gas: Gas that is received from (or delivered to) another party in exchange for gas delivered to (or received from) such other party.

Extraneous Gas: See Storage, Underground.

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Field Pipeline: See System Type.

Firm Service: Service offered to customers (regardless of Class of Services) under schedules or contracts which anticipate no interruptions. The period of service may be for only a specified part of the year as in Off-Peak Service. Certain firm service contracts may contain clauses which permit unexpected interruption in case the supply to residential customers is threatened during an emergency. Compare Interruptible Service; and Off-Peak Service.

Foreign Gas: See Storage, Underground.

Gallon: A unit of liquid measure. The U.S. gallon contains 231 cubic inches or 8.3359 pounds avoirdupois of distilled water at its maximum density and with the barometer at 30 inches.

Gas, Dry: See Gas, Natural.

Gas, Liquefied Petroleum (LPG): A gas containing certain specific hydrocarbons which are gaseous under normal atmospheric conditions but can be liquefied under moderate pressure at normal temperatures. Propane and butane are the principal examples.

Gas, Manufactured: A gas obtained by destructive distillation of coal, or by the thermal decomposition of oil, or by the reaction of steam passing through a bed of heated coal or coke or catalyst beds. Examples are coal gases, coke oven gases, producer gas, blast furnace gas, blue (water) gas, and carbureted water gas. Btu content varies widely.

Gas, Natural: A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in porous geologic formations beneath the earth's surface, often in association with petroleum. The principal constituent is methane.

Associated: Free natural gas in immediate contact, but not in solution with crude oil in the reservoir.

Dissolved: Natural gas in solution in crude oil in the reservoir.

Dry: Gas whose water content has been reduced by a dehydration process. Gas containing little or no hydrocarbons commercially recoverable as liquid product. Specified small quantities of liquids are permitted by varying statutory definition in certain states.

Liquefied (LNG): Natural gas which has been liquefied by reducing its temperature to minus 260°F at atmospheric pressure. It remains a liquid at −116°F and 673 psig. In volume it occupies 1/600 of that of the vapor.

Liquids: Those liquid hydrocarbon mixtures which are gaseous at reservoir temperatures and pressures but are recoverable by condensation or absorption. Natural gasoline and liquefied petroleum gases fall in this category.

Non-Associated: Free natural gas not in contact with, nor dissolved in, crude oil in the reservoir.

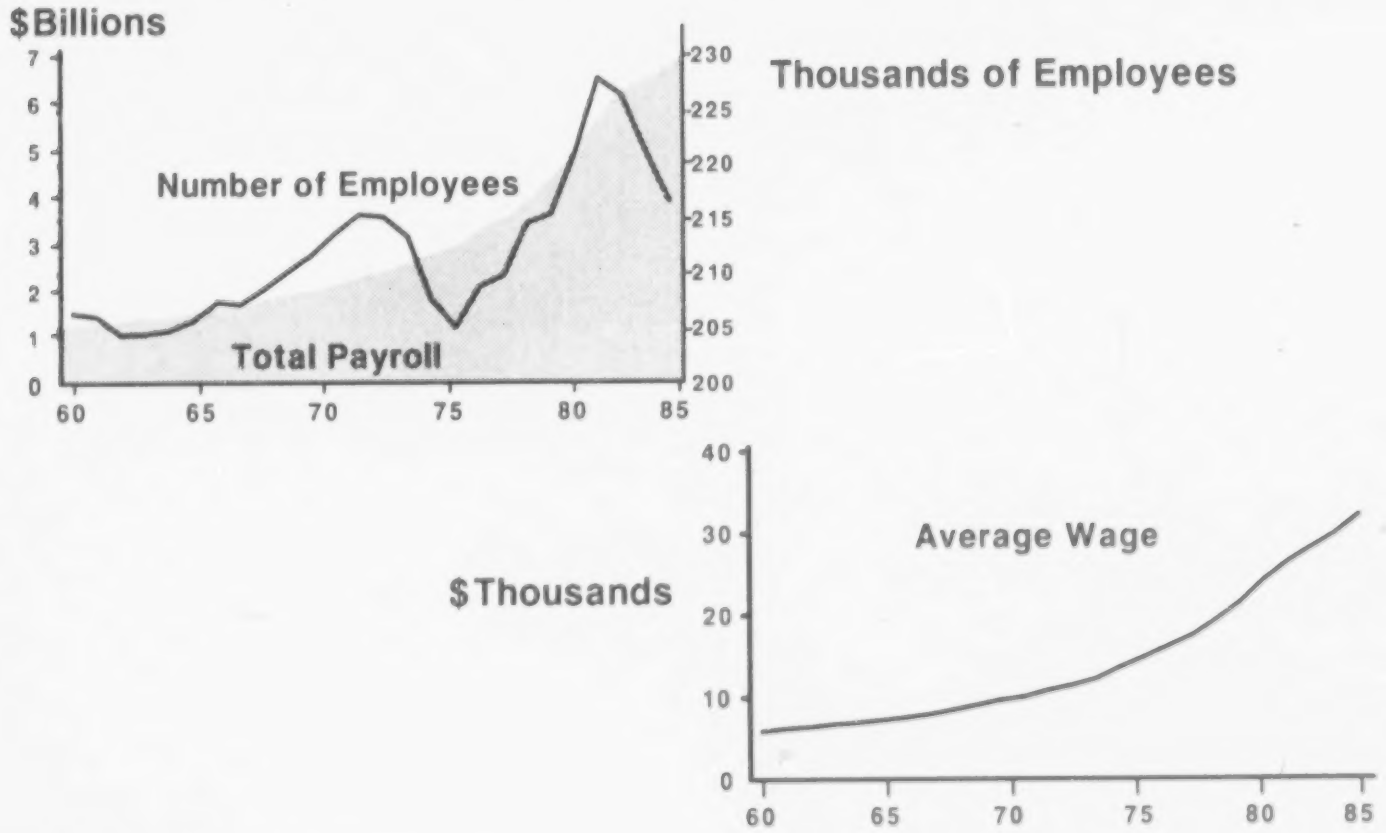
Sour: Gas found in its natural state, containing such amount of compounds of sulphur as to make it impractical to use, without purifying, because of its corrosive effect on piping and equipment.

Substitute: A gas manufactured from carbonaceous material whose characteristics are substantially interchangeable with natural gas. The resultant gas is composed primarily of methane. At this writing, SNG feedstocks are the light hydrocarbons, propane, butane and the naphthas. Development is underway of processes for production from heavier feedstocks, coal, peat and solid wastes.

Sweet: Gas found in its natural state, containing such small amount of compounds of sulphur that it can be used without purifying, with no deleterious effect on piping and equipment.

Wet: Wet natural gas is unprocessed natural gas or partially processed natural gas produced from strata containing condensable hydrocarbons. The term is subject to varying legal definitions as specified by certain state statutes.

GAS UTILITY INDUSTRY PAYROLL, EMPLOYEES AND AVERAGE WAGE



REFERENCE: TABLE 17-1

TABLE 17-5
EMPLOYEE DISABLING INJURY RATES, BY TYPE OF GAS UTILITY, 1960-1985

Z16.1 DATA

	All Reporting Gas Utilities				Natural Gas Distribution and Integrated		Natural Gas Transmission Companies		Natural Gas Combination Companies[a]	
	Reporting Companies		Rate[b]		Rate		Rate		Rate	
Year	Number	Average Employees	Frequency[c]	Severity[d]	Frequency[c]	Severity[d]	Frequency[c]	Severity[d]	Frequency[c]	Severity[d]
1960	554	195,591	7.01	563	7.45	616	5.83	332	e	e
1965	625	198,815	5.69	402	5.93	314	4.34	753	e	e
1970	719	200,493	6.34	548	6.66	522	5.02	686	e	e
1971	833	210,589	7.15	473	7.48	444	5.70	634	e	e
1972	736	205,371	8.38	535	8.98	495	5.88	762	e	e
1973	708	207,423	8.18	547	8.77[f]	373[f]	5.67	1,287	e	e
1974	644	208,283	9.08	357	9.75[g]	362[g]	6.12	333	e	e
1975	515	193,957	9.27	570	9.99[g]	518[g]	6.37	785	e	e
1976	407	153,538	11.17	365	12.87[g]	403[g]	5.31	236	e	e

OSHA DATA

	All Reporting Gas Utilities				Natural Gas Distribution and Integrated Companies		Natural Gas Transmission Companies		Natural Gas Combination Companies	
	Reporting Companies		Rate		Rate		Rate		Rate	
Year	Number	Average Employees	Incident[h]	Severity[i]	Incident[h]	Severity[i]	Incident[h]	Severity[i]	Incident[h]	Severity[i]
1976	411	223,240	2.38	20.00	3.27	18.78	1.08	39.24	1.96	19.63
1977	433	243,773	2.46	18.01	3.31	15.86	1.09	20.63	2.00	20.54
1978	423	236,661	2.46	17.11	3.41	14.86	1.10	22.51	2.10	18.90
1979	443	256,797	2.52	16.76	3.57	15.01	1.16	24.71	1.97	17.81
1980	453	262,173	2.62	18.20	3.45	14.28	1.15	32.17	2.26	21.34
1981	437	278,402	2.52	25.09	3.43	17.08	1.09	26.34	2.17	37.53
1982	424	275,725	2.33	18.36	3.39	13.63	1.15	23.10	1.90	24.30
1983	431	272,236	2.33	18.02	3.44	13.91	1.09	20.55	1.82	24.66
1984	415	254,765	2.52	16.01	3.67	13.20	1.02	19.60	1.91	21.11
1985	439	229,658	2.36	17.12	3.64	14.28	1.07	47.02	1.13	15.14

a. Included in "Natural Gas Distribution" and "Integrated Companies" under Z16.1 data.
b. Includes "Manufactured and Mixed Gas" and "Liquefied Petroleum Gas."
c. Frequency Rate is number of disabling injuries per million man-hours worked for each injury resulting in a minimum of one day's loss of time.
d. Severity Rate is number of days lost due to disabling injuries, per million man-hours worked.
e. Not available under Z16.1 data.
f. Includes "Manufactured and Mixed Gas."
g. Includes "Manufactured and Mixed Gas" and "Liquefied Petroleum Gas."
h. Incident Rate is total injuries per 100 full-time employees.
i. Severity Rate is average lost workdays per injury.

NOTE: Companies are now required to report under the Occupational Safety and Health Act (OSHA) instead of ANST Standard Z16.1.
Source: A.G.A. *Disabling Injury Experience*, 1985.

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Gas, Oil: A gas resulting from the thermal decomposition of petroleum oils, composed mainly of volatile hydrocarbons and hydrogen. The true heating value of oil gas may vary between 800 and 1600 Btu per cubic foot depending on the operating conditions and feedstock properties.

Gas, Substitute Natural (SNG): See Gas, Natural.

Gas Transported for Others: That volume of gas owned by another company received into and transported through any part of the transmission system under a transportation tariff.

Gate Station: Generally, a location at which gas changes ownership, from one party to another, neither of which is the ultimate consumer. It should be noted, however, that the gas may change from one system to another at this point without changing ownership. Also referred to as city gate station, town border station, or delivery point.

Gathering Pipeline: See System Type.

Heating Value: The amount of heat produced by the complete combustion of a unit quantity of fuel. The gross or higher heating value is that which is obtained when all of the products of combustion are cooled to the temperature existing before combustion, the water vapor formed during combustion is condensed, and all the necessary corrections have been made. The net or lower heating value is obtained by subtracting the latent heat of vaporization of the water vapor formed by the combustion of the hydrogen in the fuel, from the gross or higher heating value.

Holder, Gas: A gas-tight receptacle or container in which gas is stored for future use. (1) at approximately constant pressure (low pressure containers) in which case the volume of the container changes; and (2) in containers of constant volume (usually high pressure containers) in which case the quantity of gas stored varies with the pressure.

Holding Company: A gas holding company is a corporation that is formed for the purpose of owning stock in other gas companies.

Horsepower, Compressor: The horsepower rating on the nameplate.

Horsepower, (HP): A unit of power; equivalent to 33,000 foot-pounds per minute, or 550 foot-pounds per second (mechanical horsepower), or 0.746 kilowatts.

Hydrocarbon: A chemical compound composed solely of hydrogen and carbon. The compounds having a small number of carbon and hydrogen atoms in their molecule are usually gaseous; those with a larger number of atoms are liquid, and the compounds with the largest number of atoms are solid.

Industrial Service: See Class of Service.

Injury Frequency Rate, Disabling: Number of disabling injuries per million man-hours worked. Such injuries include disabilities and fatalities arising out of and occurring during the course of employment. A disabling injury is one which renders the employee unable to return to work on one or more days after the injury.

Injury Incident Rate: Number of injuries per 100 full-time employees.

APPENDIX A

Injury Severity Rate, Disabling: Number of days lost due to disabling per million manhours worked, including appropriate time charges according to a predetermined schedule for permanent disability cases and/or fatalities. Subsequent to 1976, severity rate is average lost workdays per injury.

Integrated Company, Gas: A company which obtains a significant portion of its gas operating revenues from the operations of both a retail gas distribution system and gas transmission system. For purposes of A.G.A. statistics, an integrated company obtains less than 90 percent but more than 10 percent of its gas operating revenues from either its retail or transmission operations or does not meet the classification of mains established for distribution or transmission companies. Compare Distribution Company, Gas; Transmission Company, Gas. See Appendix C for a partial list of Integrated Companies.

Interruptible Service: Low priority service offered to customers under schedules or contracts which anticipate and permit interruption on short notice, generally in peak-load seasons, by reason of the claim of firm service customers and higher priority users. Unlike Off-Peak Service, gas is available at any time of the year if the supply is sufficient.

Line Pack, Gas Delivered from: That volume of gas delivered to the markets supplied by the net change in pressure in the regular system of mains, transmission and/or distribution. For example, the change in the content of a pipeline brought about by the deviation from steady flow condition.

Liquefied Natural Gas (LNG): See Gas, Natural.

Liquefied Petroleum Gas (LPG): See Gas, Liquefied Petroleum.

Load: The amount of gas delivered or required at any specified point or points on a system; load originates primarily at the gas consuming equipment of the customers. Also, to load a pressure regulator is to set the regulator to maintain a given pressure as the rate of gas flow through the regulator varies. Compare Demand.

Local Storage: See Storage, Local.

Mcf: 1,000 cubic feet; Thousand cubic feet.

MMBtu: 1,000,000 Btu; Million Btu.

MMcf: 1,000,000 cubic feet; Million cubic feet.

Main: A distribution line that serves as a common source of supply for more than one gas service line.

Distribution Mains: See System Type.

Field and Gathering Pipeline: See System Type.

Transmission Pipeline: See System Type.

Manufactured Gas: See Gas, Manufactured.

Marketable Natural Gas: Raw gas from which certain hydrocarbons and non-hydrocarbon compounds have been removed by processing. Marketable natural gas is often referred to as pipeline gas, residue gas, or sales gas.

Maximum Day:
Allocation: See Design Day Availability.
Sendout: See Sendout, Maximum Day.

Minimum Day: See Sendout, Minimum Day.

Naphtha: Any of various volatile, often flammable liquid hydrocarbon mixtures used chiefly as solvents and diluents and as raw materials for conversion to gasoline and substitute natural gas (SNG).

Native Base Gas: See Storage, Underground.

Natural Gas: See Gas, Natural.

Natural Gas, Associated: See Gas, Natural.

Natural Gas, Dissolved: See Gas, Natural.

Natural Gas, Dry: See Gas, Natural.

Natural Gas, Liquefied: See Gas, Natural.

Natural Gas Liquids: See Gas, Natural.

Natural Gas, Non-Associated: See Gas, Natural.

Natural Gas Reserves: See Reserves.

Natural Gas, Sour: See Gas, Natural.

Natural Gas, Sweet: See Gas, Natural.

Natural Gas, Wet: See Gas, Natural.

Natural Gasoline: Liquid removed from natural gas by absorption or refrigeration and containing hydrocarbons heavier than butane.

Off-Peak Service: Service made available on special schedules or contracts but only for a specified part of the year during the off-peak season. Compare Interruptible Service.

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Oil Gas: See Gas, Oil.

Oil, Heavy: Heavy, thick and viscous oils. Usually refinery residuals commonly specified as grades 5 and 6.

Oil, Light: Generally, all oils lighter than residual fuel oils No. 5 and No. 6. Oils that have a low specific gravity, usually products of controlled distillation of crude oil but also including by-product benzol and toluol.

Peak Day: The 24-hour day period of greatest total gas sendout. Compare Design Day.

Peak Shaving: Supplying fuel gas for distribution system from an auxiliary source (of limited supply and higher cost) during periods of maximum demand when the primary source is not adequate.

Pipeline: All parts of those physical facilities through which gas is moved in transportation, including pipe, valves and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders and fabricated assemblies. See System Type.

Pressure, Absolute: Pressure above that of a perfect vacuum. It is the sum of gauge pressure and atmospheric pressure.

Pressure, Gauge (psig): Pounds per square inch above atmospheric pressure.

Producer Gas (Also, Manufactured Gas): A combustible gas made in a furnace or apparatus by circulating air or a mixture of air and steam through a layer of incandescent material consisting chiefly of carbon monoxide, hydrogen and nitrogen.

Propane (C_3H_8): A gaseous member of the paraffin series of hydrocarbons, which when liquified under pressure is one of the components of liquefied petroleum (LP) gas. Contains approximately 2,500 Btu per cubic foot (at 60°F and 30" mercury, and 91,740 Btu per gallon).

Recoverable Natural Gas Reserves: See Reserves, Recoverable Natural Gas.

Refinery Gas: See Gas, Oil.

Reforming: A chemical process using heat in presence of a catalyst to break down a substance into desired components, such as in the reforming of natural gas or light oils into lower Btu fuel gas.

Repressuring: Forcing gas, under pressure, into the oil reservoir in an attempt to increase the recovery of crude oil; also done with water.

Resale Service: See Class of Service, Sales for Resale.

Reserves, Energy: Refers to the bank of natural resources, such as natural gas, natural gas liquids, petroleum, coal, lignite, and energy available from water power, and solar and geothermal energy.

Estimated Potential Natural Gas Reserves: Refers to an estimate of the ultimate finding of natural gas in a specified area, whether or not presently considered proved or recoverable.

Estimated Proved Natural Gas Reserves: An estimated quantity of natural gas which analysis of geologic and engineering data demonstrates with reasonable certainty to be recoverable in the future from known oil and gas reservoirs, under existing economic and operating conditions. Reservoirs that have demonstrated the ability to produce by either actual production or conclusive formation test are considered proved.

Saturation, Appliance or Customer: The number of specified appliances, or users, divided by the basic units or total potential of the universe involved, i.e., Gas Heating Saturation related to customers is the total number of customers with space heating divided by the total number of customers. Saturation should not be used alone but should be associated with customers, families, households, population or other qualifying terms indicating the universe referred to. For industry statistics, saturation based on customers served is used.

Sendout, Gas: Total gas produced, purchased (including exchange gas receipts), or net withdrawn from underground storage within a specified time interval, measured at the point(s) of production and/or purchase, and/or withdrawal, adjusted for changes in local storage quantity. It comprises gas sales, exchange deliveries, gas used by company and unaccounted for gas. Expressed in various units such as therms, Btu's, cubic feet, etc.

Sendout, Maximum Day: The greatest actual total gas sendout occurring in a specified 24-hour period. Compare Design Day; Peak Day.

Sendout, Minimum Day: The smallest actual total gas sendout occurring in a specified 24-hour period.

Service (Service Line, Service Pipe): The pipe which carries gas from the main to the customer's meter. Compare Class of Service.

Shrinkage, Natural Gas: The reduction is volume of wet natural gas due to the extraction of some of its constituents, such as hydrocarbon products, hydrogen sulfide, carbon dioxide, nitrogen, helium, and water vapor.

Storage, Buried Pipe (Bottle-Type Holder): A system of storage in especially designed high pressure pipe sections or bottles capable of storing natural gas at pressures near or equal to the pressure of maximum super-compressibility. Not storage in ordinary steel pipe.

Storage, Local: The storage facilities, other than underground storage, that are an integral part of a distribution system, i.e., on the distribution side of the city gate, whether for manufactured, mixed, natural, liquefied petroleum, or liquefied natural gases.

Storage Mains: Those mains used primarily for injection and withdrawal of gas to and from underground storage.

Storage, Underground: The utilization of subsurface facilities for storing gas which has been transferred from its original location for the primary purposes of load balancing. The facilities are usually natural geological reservoirs such as depleted oil or gas fields or waterbearing sands sealed on the top by an impermeable cap rock. The facilities also may be manmade or natural caverns.

APPENDIX A

Aquifer Storage: The storage of gas underground in porous and permeable rock stratum, the pore space of which was originally filled with water and in which the stored gas is confined by suitable structure, permeability barriers and hydrostatic water pressure.

Base Gas (Also called cushion gas): The total volume of gas which will maintain the required rate of delivery during an output cycle.

Current Gas: The total volume of gas in a storage reservoir which is in excess of the base gas. Also called Working Gas.

Extraneous Gas: See Stored Gas, this section.

Foreign Gas: See Stored Gas, this section.

Native Gas: The total volume of gas indigenous to the storage reservoir.

Storage Reservoir: That part of the storage zone having a defined limit of porosity and/or permeability which can effectively accept, retain, and deliver gas.

Storage Well: A cased bore hole, extending from the surface into the storage zone, which is used primarily for gas input and/or output purposes.

Stored Gas: Gas physically injected into a storage reservoir.

Ultimate Reservoir Capacity: The total estimated volume of gas that could be contained in storage reservoir when it is developed to the maximum design pressure.

Working Gas: Gas in an underground storage field that is available for market. May also be called Current Gas.

Straight Gas Utility: Company which derives the major portion of its total operating revenues from gas operations. For purposes of A.G.A. statistics, a straight gas utility derives at least 95 percent of its total operating revenues from gas operations. See Combination Gas Utility.

Subbituminous Coal: Ranking of soft coal generally having a heating value of 8,300–13,000 Btu's/lb-high volatile matter and ash.

Substitute Natural Gas: See Gas, Natural.

System Type:

Distribution: Generally mains, services, and equipment which carry or control the supply of gas from the point of local supply to and including the sales meters. The system operates at various pressures as indicated below.

High Pressure: A system which operates at a pressure higher than the standard service pressure delivered to the customer; thus, a pressure regulator is required on each service to control pressure delivered to the customer. Sometimes this is referred to as medium pressure.

Low Pressure or Utilization Pressure: A system in which the gas pressure in the mains and service lines is substantially the same as that delivered to the customers' appliances; ordinarily a pressure regulator is not required on individual service lines.

Field and Gathering: A network of pipelines (mains) transporting natural gas from individual wells to compressor station, processing point, or main trunk pipeline.

Main: The network of distribution piping to which customers' service lines are attached. Generally large pipes are laid in principal streets with smaller laterals extending along side streets and connected at their ends to form a grid; sometimes laterals are brought to dead ends. Compare with Distribution, this section.

Transmission: Pipelines (Mains) installed for the purpose of transmitting gas from a source or sources of supply to one or more distribution centers, or to one or more large volume customers, or a pipeline installed to interconnect sources of supply. In typical cases transmission lines differ from gas mains in that they operate at higher pressures, are longer, and the distance between connections is greater.

Tcf: 1,000,000,000,000 cubic feet; Trillion cubic feet.

Therm: A unit of heating value equivalent to 100,000 British thermal units (Btu).

Transmission Company, Gas: A company which obtains at least 90 percent of its gas operating revenues from sales for resale and/or transportation of gas for others and/or main line sales to industrial customers *and* classifies at least 90 percent of mains (other than service pipe) as field and gathering, storage and/or transmission. Compare Distribution Company, Gas; Integrated Company, Gas. See Appendix C for a partial list of Transmission companies.

Transmission Pipeline: See System Type.

Transmission System: See System Type.

Ultimate Customer: The customer who purchases gas for consumption and not for resale purposes.

Ultimate Reservoir Capacity: See Storage, Underground.

Unaccounted for Gas: The difference between the total gas available from all sources and the total gas accounted for as sales, net interchange and company use. This difference includes leakage or other actual losses, discrepancies due to meter inaccuracies, variations of temperature and/or pressure, other variants, particularly due to measurements being made at different times. In cycle billings, an amount of gas supply used but not billed as of the end of a period. Compare Sendout, Gas.

Underground Storage: See Storage, Underground.

Water Gas (Blue Gas): Made by passing steam over hot coke or other carbonaceous material; it consists of carbon monoxide and hydrogen with varying amounts of carbon dioxide and nitrogen. It burns with a blue flame.

Well, Wildcat: An exploratory well being drilled in unproven territory, that is, in a horizon from which there is no production in the general area.

Wet Natural Gas: See Gas, Natural.

Working Gas: See Storage, Underground.

APPENDIX B
CONVERSION TABLE

The following are some frequently used units of measure and natural gas equivalents in British thermal units (Btu). Read "=" as "contains" between volumes and energy units.
The national average Btu content per cubic foot is used. For state averages, see page 76.

1 Cubic Foot (cf) = 0.02832 Cubic Meters = 1,029.8 Btu
1 Therm = 100,000 Btu ≃ 25,200 Kilocalories ≃ 100 Cubic Feet
1 Mcf = 1,000 Cubic Feet = 28.32 Cubic Meters = 1,029,800 Btu
1 M Therm = 100,000,000 Btu ≃ 25,200,000 Kilocalories
1 MMcf = 1,000,000 Cubic Feet = 1,029,800,000 Btu

Conversion examples:
(1) To convert 2,325 MMcf to trillions of Btu:
(2,325 MMcf) (1,029,800,000 Btu/MMcf)
= 2,394,285,000,000 Btu
≃ 2.394 trillion Btu
(2) To convert 5,000 trillion Btu to millions of cubic feet:
(5,000 trillion Btu) (1 cf/1,029.8 Btu)
≃ 4.855 trillion cf (Tcf)
≃ 4,855,312 MMcf
(2) To convert 22,150 million therms to trillions of Btu:
(22,150 million therms) (100,000 Btu/therm)
= 2,215,000,000 million Btu
= 2,215 trillion Btu
(4) To convert the Btu content of 1 cubic foot at 15.05 psia to 14.73 psia:
(1,049 Btu/cf) (14.73 psia/15.05 psia)
≃ 1,026.7 Btu/cf

For comparative purposes, Btu contents of various energy sources other than natural gas are shown below.*

Fuel Oil (barrel)	
Distillate	5,825,000 Btu
Residual	6,287,000 Btu
Coal (short ton)	
Bituminous and lignite	21,367,000 Btu
Anthracite	21,781,000 Btu
Electricity (kilowatt-hour)	3,412 Btu
Natural gas liquids (barrel)	3,815,000 Btu

* Department of Energy, Energy Information Administration, *Monthly Energy Review*, February 1986.

APPENDIX C
COMPANY LISTINGS

Shown below are 100 selected companies, 25 for each company type, as used in the financial and other sections of this publication. These lists are *not* meant to be *comprehensive*. Inclusion on this list does not imply individual company data may be released.

Distribution

Alabama Gas Corporation
Berkshire Gas Company, The
Boston Gas Company
Brooklyn Union Gas Company, The
Chattanooga Gas Company
Columbia Gas of Kentucky, Inc.
Columbia Gas of Ohio, Inc.
Columbia Gas of Pennsylvania, Inc.
Commonwealth Gas Company
Elizabethtown Gas Company
ENTEX, Inc.
Great Falls Gas Company
Minnegasco, Inc.
Mississippi Valley Gas Company
North Central Public Service Company
North Shore Gas Company
Northwest Natural Gas Company
Peoples Gas System, Inc.
Providence Gas Company
Richmond Gas Corporation
Southern Connecticut Gas Company, The
Washington Gas Light Company
Washington Natural Gas Company
Wisconsin Gas Company
Wisconsin Natural Gas Company

Integrated

Arkansas Louisiana Gas Company
Arkansas Oklahoma Gas Corporation
Arkansas Western Gas Company
Associated Natural Gas Company
Battle Creek Gas Company
Corning Natural Gas Company
East Ohio Gas Company, The
Enserch Corporation
Intermountain Gas Company
Kansas Nebraska Energy, Inc.
Michigan Consolidated Gas Company
Michigan Gas Utilities Company
Mountain Fuel Supply Company
National Fuel Gas Company
North Carolina Natural Gas Company
North Penn Gas Company
Ohio Valley Gas Corporation
Oklahoma Natural Gas Company
Peoples Natural Gas Co., The
Public Service Company of North Carolina, Inc.
Rocky Mountain Natural Gas Company
Southern California Gas Company
Terre Haute Gas Corporation
Vermont Gas Systems, Inc.
Western Kentucky Gas Company

Transmission

Alabama Tennessee Natural Gas Co.
Algonquin Gas Transmission Company
ANR Pipeline Company
Colorado Interstate Gas Company
Columbia Gas Transmission Corporation
Columbia Gulf Transmission Company
East Tennessee Natural Gas Company
El Paso Natural Gas Company
Great Lakes Transmission Company
Houston Natural Gas Corporation
Midwestern Gas Transmission Company
Natural Gas Pipeline Co. of America
Northwest Central Pipeline Company
Northwest Pipeline Corporation
Pacific Gas Transmission Company
Panhandle Eastern Pipe Line Company
Southern Natural Gas Company
Texas Eastern Transmission Corporation
Texas Gas Transmission Corporation
Transcontinental Gas Pipe Line Corp.
Transok Pipe Line Company
Transwestern Pipeline Company
Trunkline Gas Company
United Gas Pipeline Company
Western Gas Supply Company

Combination

Baltimore Gas and Electric Company
Central Illinois Light Company
Cincinnati Gas and Electric Company
Consolidated Edison Co. of NY Inc.
Consumers Power Company
Dayton Power & Light Company
Florida Public Utilities Company
Illinois Power Company
Iowa Electric Light & Power Company
Iowa-Illinois Gas & Electric Company
Kansas Power & Light Company
Long Island Lighting Company
Louisville Gas & Electric Company
Madison Gas & Electric Company
Montana-Dakota Utilities Company
Montana Power Company
Niagara-Mohawk Power Corporation
Northern Indiana Public Service Company
Pacific Gas & Electric Company
Philadelphia Electric Company
Public Service Co. of Colorado
Public Service Electric & Gas Company
San Diego Gas & Electric Company
Virginia Electric & Power Company
Wisconsin Public Service Corporation

APPENDIX D
GAS REQUIREMENTS COMMITTEE, NATURAL GAS CONSUMPTION

The Gas Requirements Committee (GRC) is a subcommittee of the Gas Demand Committee, a board-level committee of the American Gas Association. The GRC has been publishing reports on gas consumption since 1964, and is considered one of the three major sources of comprehensive data on natural gas consumption. The Energy Information Agency (EIA) within the U.S. Department of Energy and the American Gas Association are the other two. The Statistics and Related Economics Committee of the A.G.A. has decided to include the GRC data on natural gas consumption in this edition as part of the effort to continually improve the usefulness of the data provided in *Gas Facts.*

Comparison of consumption figures published by the three above-mentioned sources for any given year would result in some discrepancies. Certainly one reasonable explanation is that the three groups use different methods in the collection and compilation of natural gas consumption data. The major differences are caused by varying definitions, sample sizes, and points of measurement.

The GRC measure of consumption is defined as adding together the end-use consumption of all gas users including company use, unaccounted for gas and field use on a national basis only. The EIA measure of consumption is defined as the sum of deliveries to consumers, lease and plant fuel, and pipeline fuel. The A.G.A. measure of consumption is restricted to sales to consumers that are made by gas utility companies *only* and, therefore, is a subset of total United States gas consumption.

It is not the intention of the Statistics and Related Economics Committee to reconcile the differences among the reported consumption data. Rather, the reader should be aware that three sources of data exist. If the reader wishes to further analyze the GRC or EIA consumption data, it is reported in the GRC *Future Gas Consumption in the United States* reports or the EIA *Natural Gas Annual* reports.

The subsequent pages excerpt the following information from GRC publications: United States gas consumption by state, region and class of service—1985, total commercial and industrial consumption by standard industrial classification—1985, and United States gas consumption by class of service, 1975–1985.

1985

UNITED STATES GAS CONSUMPTION BY STATE, REGION & CLASS OF SERVICE

(Millions of Cubic Feet)[a]

	Region and State	Firm			
		Residential	Commercial	Industrial	Electric Utilities
(1)	**United States Total**				
(2)	**Field Use**				
(3)	**Total Excluding Field Use**	**4,559,026**	**2,255,642**	**3,845,440**	**1,616,996**
(4)	**1. New England**	**149,703**	**76,937**	**29,533**	**108**
(5)	Connecticut	32,949	16,916	9,565	—
(6)	Maine	540	1,127	625	—
(7)	Massachusetts	95,096	48,552	15,713	108
(8)	New Hampshire	4,645	4,207	530	—
(9)	Rhode Island	15,028	5,135	2,969	—
(10)	Vermont	1,445	1,000	131	—
(11)	**2. Appalachian**	**1,313,482**	**566,004**	**522,807**	**2,568**
(12)	Delaware	7,362	3,412	3,795	32
(13)	District of Columbia	16,462	5,652	442	—
(14)	Kentucky	60,917	31,563	33,240	744
(15)	Maryland	69,304	14,640	24,884	198
(16)	New Jersey	153,017	76,715	31,852	—
(17)	New York	328,264	136,489	70,256	1,110
(18)	Ohio	337,983	146,580	159,075	379
(19)	Pennsylvania	250,980	109,922	145,809	105
(20)	Virginia	50,480	22,974	28,211	—
(21)	West Virginia	38,713	18,057	25,243	—
(22)	**3. Southeast**	**259,122**	**160,985**	**216,126**	**52,114**
(23)	Alabama	54,541	19,588	52,885	1,024
(24)	Florida	15,828	25,873	17,806	50,438
(25)	Georgia	85,997	41,550	26,938	—
(26)	North Carolina	29,412	23,013	58,795	633
(27)	South Carolina	29,081	10,039	15,098	3
(28)	Tennessee	44,263	40,922	44,604	16
(29)	**4. Great Lakes**	**1,066,079**	**517,014**	**558,037**	**7,377**
(30)	Illinois	455,923	216,338	233,213	4,395
(31)	Indiana	148,220	67,906	152,240	952
(32)	Michigan	345,160	162,974	137,836	1,857
(33)	Wisconsin	116,776	69,796	34,748	173
(34)	**5. Northern Plains**	**251,351**	**140,204**	**91,039**	**565**
(35)	Iowa	78,381	38,663	60,420	562
(36)	Minnesota	103,806	54,450	10,150	3
(37)	Nebraska	47,653	31,686	18,717	—
(38)	North Dakota	10,174	7,761	700	—
(39)	South Dakota	11,337	7,644	1,052	—
(40)	**6. Mid-Continent**	**289,531**	**126,753**	**141,982**	**238,715**
(41)	Kansas	85,952	34,398	36,266	10,881
(42)	Missouri	128,243	52,394	21,780	—
(43)	Oklahoma	75,336	39,961	83,936	227,834
(44)	**7. Gulf Coast**	**364,173**	**215,659**	**2,039,345**	**1,232,523**
(45)	Arkansas	41,784	23,376	69,098	10,127
(46)	Louisiana	66,318	32,430	714,461	179,307
(47)	Mississippi	28,920	18,825	67,493	47,171
(48)	Texas	227,151	141,028	1,188,293	995,918
(49)	**8. Rocky Mountain**	**168,112**	**104,619**	**31,520**	**1,668**
(50)	Colorado	87,827	61,039	18,041	1,668
(51)	Montana	19,142	13,864	1,686	—
(52)	Utah	48,563	19,822	5,087	—
(53)	Wyoming	12,580	9,894	6,706	—
(54)	**9. Pacific Southwest**	**619,990**	**273,212**	**91,668**	**68,926**
(55)	Arizona	29,146	26,882	22,811	43,399
(56)	California	551,669	215,288	52,192	4,163
(57)	Nevada	16,164	9,390	5,833	8,504
(58)	New Mexico	23,011	21,652	10,832	12,860
(59)	**10. Pacific Northwest**	**64,267**	**52,641**	**54,510**	**32**
(60)	Idaho	7,810	8,756	18,997	21
(61)	Oregon	22,052	18,874	11,257	—
(62)	Washington	34,405	25,011	24,256	11
(63)	**11. Pacific**	**13,216**	**21,614**	**68,873**	**12,400**
(64)	Alaska	12,625	19,334	68,873	12,400
(65)	Hawaii	591	2,280	—	—

a. Btu content equals 1,000 Btu per cubic foot.

APPENDIX D

1985 (Continued)
UNITED STATES GAS CONSUMPTION BY STATE, REGION & CLASS OF SERVICE

(Millions of Cubic Feet)[a]

Interruptible					
Commercial	Industrial	Electric Utilities	Other	Total Consumption	
				18,423,124	**(1)**
				1,051,000	**(2)**
302,322	**2,154,120**	**1,567,307**	**1,071,271**	**17,372,124**	**(3)**
15,221	**27,530**	**43,099**	**16,317**	**358,448**	**(4)**
8,285	9,426	1,611	4,290	83,042	(5)
—	228	—	113	2,633	(6)
3,795	13,715	38,780	9,527	225,286	(7)
—	957	82	404	10,825	(8)
2,578	1,480	2,532	1,763	31,485	(9)
563	1,724	94	220	5,177	(10)
68,105	**341,960**	**269,623**	**243,784**	**3,328,333**	**(11)**
139	3,725	6,106	1,031	25,602	(12)
5,234	183	—	1,248	29,221	(13)
549	17,384	346	22,696	167,439	(14)
7,083	34,748	49	8,931	159,837	(15)
6,992	51,285	63,085	24,325	407,271	(16)
22,840	34,557	197,502	42,223	833,241	(17)
3,970	100,736	114	28,018	776,855	(18)
11,689	73,779	1,137	59,998	653,419	(19)
9,048	12,417	1,136	11,209	135,475	(20)
561	13,146	148	44,105	139,973	(21)
34,958	**346,671**	**119,057**	**79,028**	**1,268,061**	**(22)**
3,344	66,956	62	16,035	214,435	(23)
9,524	56,981	117,766	6,525	300,741	(24)
12,000	116,755	908	27,735	311,883	(25)
1,256	17,959	4	8,437	139,509	(26)
4,124	37,719	317	5,580	101,961	(27)
4,710	50,301	—	14,716	199,532	(28)
16,896	**237,233**	**5,053**	**89,924**	**2,497,613**	**(29)**
391	53,652	3,345	62,328	1,029,585	(30)
2,159	64,954	—	12,199	448,630	(31)
2,447	44,551	440	11,273	706,538	(32)
11,899	74,076	1,268	4,124	312,860	(33)
49,784	**98,101**	**5,845**	**24,248**	**661,137**	**(34)**
7,433	29,824	597	13,476	229,356	(35)
28,561	48,848	3,743	4,341	253,902	(36)
8,159	16,330	1,487	5,764	129,796	(37)
2,566	1,349	7	570	23,127	(38)
3,065	1,750	11	97	24,956	(39)
45,268	**240,678**	**14,151**	**91,891**	**1,188,969**	**(40)**
31,622	99,374	8,750	56,837	364,080	(41)
9,910	38,770	2,639	12,861	266,597	(42)
3,736	102,534	2,762	22,193	558,292	(43)
5,621	**466,132**	**414,491**	**385,426**	**5,123,370**	**(44)**
4,241	14,032	—	17,703	180,361	(45)
1,379	135,595	149,015	94,380	1,372,885	(46)
—	3,649	317	26,924	193,299	(47)
1	312,856	265,159	246,419	3,376,825	(48)
17,457	**54,979**	**4,048**	**11,256**	**393,659**	**(49)**
9,783	10,632	4,029	8,158	201,177	(50)
301	7,049	19	985	43,046	(51)
6,669	23,824	—	700	104,665	(52)
704	13,474	—	1,413	44,771	(53)
33,824	**265,448**	**673,347**	**121,653**	**2,148,068**	**(54)**
—	—	—	18,592	140,830	(55)
33,824	265,448	673,347	75,835	1,871,766	(56)
—	—	—	1,541	41,432	(57)
—	—	—	25,685	94,040	(58)
12,604	**70,888**	**61**	**3,755**	**258,758**	**(59)**
304	632	—	150	36,670	(60)
638	27,467	—	1,335	81,623	(61)
11,662	42,789	61	2,270	140,465	(62)
2,584	**4,500**	**18,532**	**3,989**	**145,708**	**(63)**
2,335	4,500	18,532	3,885	142,484	(64)
249	—	—	104	3,224	(65)

1985
TOTAL COMMERCIAL AND INDUSTRIAL CONSUMPTION BY STANDARD INDUSTRIAL CLASSIFICATION

(Millions of Cubic Feet)[a]

Group	Description	Region[b] 1	2	3	4
01–09	Agriculture, Forestry & Fishing	829	4,928	124	8,212
10–14	Mining	13	1,432	2,539	3,808
15–17	Construction	979	7,285	668	4,882
20	Food & Kindred Products	4,431	62,206	47,711	95,793
21	Tobacco Manufacturers	105	1,685	715	96
22	Textile Mill Products	2,179	9,960	48,949	1,895
23	Apparel & Other Textile Products	273	4,028	5,825	729
24	Lumber & Wood Products	187	4,307	2,698	3,448
25	Furniture & Fixtures	208	2,840	1,003	4,279
26	Paper & Allied Products	2,748	42,617	54,169	48,921
27	Printing & Publishing	941	6,309	1,179	8,711
28	Chemicals & Allied Products	2,660	124,368	89,199	83,149
29	Petroleum & Coal Products	320	22,260	15,515	29,710
30	Rubber & Misc. Plastics Products	1,109	18,493	11,155	14,024
31	Leather & Leather Products	129	874	594	2,141
32	Stone, Clay, Glass & Concrete Products	4,234	94,882	56,967	39,037
331–332	Primary Iron & Steel	3,173	183,611	32,034	196,942
333–339	Primary Nonferrous Metals	881	51,448	14,663	34,921
34	Fabricated Metal Products	5,319	43,779	9,382	39,110
35	Machinery, except Electrical	3,381	31,717	3,281	32,551
36	Electric & Electronic Equipment	2,777	24,730	5,923	20,159
37	Transportation Equipment	1,313	32,345	6,048	49,367
38	Instruments & Related Products	1,393	5,259	625	1,851
39	Other Manufacturing	809	23,305	3,974	18,314
40–48	Transportation	3,129	18,929	2,068	10,968
49	Utility Services other Than Electric Generation	4,299	14,196	1,486	19,778
50–51	Wholesale Trade	2,311	15,563	2,725	14,315
52–57,59	Retail Trade	5,709	33,209	3,939	33,000
58	Restaurants and Drinking Places	6,122	29,833	14,159	23,402
60–64,66,67	Finance & Insurance	1,148	6,729	612	5,092
65	Real Estate (Apartments)	15,927	77,542	7,747	36,575
70	Hotels & Other Lodging Places	1,409	12,639	3,383	12,262
72–79	Services	4,254	34,463	4,817	51,156
80	Health Services, Hospitals	5,716	52,908	17,046	43,792
81,83,84	Legal & Social Services	459	4,592	1,711	17,862
82	Education (Schools)	5,096	56,053	11,972	60,220
86,88,89	Membership Organization & Misc. Services	1,801	24,338	1,790	20,992
91–97	Public Administration	2,537	28,997	12,227	28,480
99	Non-Classifiable	944	4,476	1,074	11,882
	Not Classified by SIC or Unreported	47,969	279,741	257,044	197,344
	Total Commercial & Industrial	**149,221**	**1,498,876**	**758,740**	**1,329,180**

a. Btu content equals 1,000 Btu per cubic foot.
b. For region definition see previous table on page 208.

APPENDIX D

1985 (continued)
TOTAL COMMERCIAL AND INDUSTRIAL CONSUMPTION BY STANDARD INDUSTRIAL CLASSIFICATION

(Millions of Cubic Feet)[a]

Region[b]								
5	6	7	8	9	10	11	Total	Group
1,700	9,346	20,807	2,123	14,541	1,288	—	63,898	01–09
502	17,891	16,409	5,975	38,040	5,018	—	91,627	10–14
689	337	1,271	1,529	2,177	458	—	20,275	15–17
16,835	16,681	34,134	10,043	53,060	21,337	—	362,231	20
10	1	206	1	—	—	—	2,819	21
130	507	750	32	3,825	237	—	68,464	22
80	8	731	53	696	56	—	12,479	23
3,297	6,667	4,512	263	2,337	6,313	—	34,029	24
413	107	639	60	1,057	81	—	10,687	25
2,378	3,098	55,517	3,392	23,766	30,045	—	266,651	26
199	310	550	170	2,253	6,473	—	27,095	27
31,637	141,526	929,780	17,146	33,976	8,088	—	1,461,529	28
655	47,173	651,017	13,209	74,686	7,867	—	862,412	29
1,156	3,657	14,617	1,086	3,490	199	—	68,986	30
95	1,400	53	51	242	9	—	5,588	31
2,018	21,404	34,006	4,879	43,999	4,547	—	305,973	32
399	1,913	5,908	14,006	6,408	4,121	—	448,515	331–332
1,233	5,513	78,532	1,354	24,055	6,458	—	219,058	333–339
1,058	3,645	11,900	740	11,527	895	—	127,355	34
2,120	398	3,111	1,508	4,492	1,767	—	84,326	35
928	6,566	3,564	924	6,843	222	—	72,636	36
407	6,771	5,503	929	10,042	5,219	—	117,944	37
127	781	342	1,183	1,220	47	—	12,828	38
1,065	931	4,894	320	927	4,557	—	59,096	39
1,915	8,420	1,795	4,196	6,653	1,466	—	59,539	40–48
2,158	11,498	11,927	650	15,122	1,331	—	82,445	49
2,394	724	1,738	1,945	7,825	1,263	—	50,803	50–51
5,354	3,521	17,766	7,747	11,373	2,419	—	124,037	52–57,59
2,041	2,151	3,438	2,994	24,902	2,720	342	112,104	58
1,206	426	684	933	2,622	255	—	19,712	60–64,66,67
4,701	4,966	4,566	18,356	9,558	2,706	570	183,214	65
1,687	1,667	3,881	2,820	14,134	1,331	1,314	56,527	70
3,461	1,077	2,711	4,880	23,257	2,962	—	133,038	72–79
4,731	22,377	7,996	4,646	17,437	5,214	130	181,993	80
1,544	99	1,107	395	3,087	425	—	31,281	81,83,84
7,896	8,564	7,805	8,736	22,456	5,884	160	194,842	82
2,230	620	1,275	2,017	9,965	1,164	—	66,197	86,88,89
1,640	6,219	2,715	6,683	12,260	3,162	13	104,833	91–97
386	11,873	285	13,543	6,084	247	—	50,794	99
266,653	173,848	778,315	47,158	113,758	42,792	95,042	2,299,664	
379,128	**554,681**	**2,726,757**	**208,575**	**664,152**	**190,643**	**97,571**	**8,557,524**	

UNITED STATES GAS CONSUMPTION BY CLASS OF SERVICE, 1975–1985

(Millions of Cubic Feet)[a]

Year	Firm				Interruptible						
	Residential	Commercial	Industrial	Electric Utilities	Commercial	Industrial	Electric Utilities	Other	Total Excluding Field Use	Field Use	Total Consumption
1975	4,981,448	2,415,713	5,116,697	2,025,981	271,223	1,935,675	1,024,480	1,173,759	18,944,976	1,426,000	20,370,976
1976	5,090,126	2,536,585	5,334,144	2,106,927	270,359	1,846,102	956,247	1,243,448	19,383,038	1,667,000	21,050,038
1977	4,909,373	2,463,206	5,019,752	2,017,471	222,735	1,651,440	998,913	1,167,724	18,450,614	1,694,000	20,144,614
1978	5,132,207	2,746,861	6,486,614	2,926,048	b	b	b	1,304,150	18,595,880	1,679,000	20,274,880
1979	5,144,003	2,770,674	6,973,202	3,274,967	b	b	b	1,233,424	19,396,270	1,530,000	20,926,270
1980	4,868,509	2,363,209	5,167,578	2,161,516	247,205	1,967,741	1,430,447	1,354,737	19,560,942	1,053,000	20,613,942
1981	4,654,258	2,240,388	5,026,609	2,142,754	249,760	2,001,333	1,632,357	1,350,019	19,297,478	953,000	20,250,478
1982	4,708,934	2,303,029	4,045,749	1,927,775	270,952	1,655,883	1,346,773	1,141,246	17,400,341	1,140,000	18,540,341
1983	4,429,538	2,179,757	3,763,706	1,721,185	258,656	1,903,910	1,294,767	1,180,978	16,732,497	1,009,000	17,741,497
1984[R]	4,632,219	2,297,317	3,861,396	1,683,711	291,848	2,097,198	1,515,668	960,594	17,339,951	1,110,000	18,449,951
1985	4,559,026	2,255,642	3,845,440	1,616,976	302,322	2,154,120	1,567,307	1,071,271	17,372,124	1,051,000	18,423,124

a. Btu content equals 1,000 Btu per cubic foot.
b. In 1978 and 1979, firm and interruptible service were not measured individually; therefore all consumption is included under firm for each class of service.
R–Revised.

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